

Golden

Smart Contract Audit Report





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AUDITED DETAILS

Audited Project

Project name	Token ticker	Blockchain	
Golden	Golden	Ethereum	

Addresses

Contract address	0x40f8a48d7579039d42ff832e67fad7d891640bdb	
Contract deployer address	0x3199Aa75b842d843BCc079703EBff6cec61AD8c1	

Project Website

https://goldensmartcontract.com/

Codebase

https://etherscan.io/address/0x40f8a48d7579039d42ff832e67fad7d891640bdb#code



SUMMARY

\$golden operates in a zero-fee environment, making it an attractive option for those looking to participate in the DeFi space without incurring high transaction costs.

Contract Summary

Documentation Quality

Golden provides a very good documentation with standard of solidity base code.

• The technical description is provided clearly and structured and also dont have any high risk issue.

Code Quality

The Overall quality of the basecode is standard.

 Standard solidity basecode and rules are already followed by Golden with the discovery of several low issues.

Test Coverage

Test coverage of the project is 100% (Through Codebase)

Audit Findings Summary

- SWC-101 | It is recommended to use vetted safe math libraries for arithmetic operations consistently on lines 390, 409, 431, 464, 466, 487, 488, 513, 515, 611, 625, 640, 641, 654, 666, 681, 695, 709, 723, 739, 762, 785, 811, 1145, 1147, 1148, 1149, 1154, 1154, 1154, 1159, 1159, 1208, 1208, 1212, 1212, 1221, 1221, 1221, 1224, 1224, 1229, 1229, 1229, 1232, 1232, 1255, 1255, 1267, 1267, 1367, 1382, 1412, 1431, 1431, 1432, 1432, 1432, 1433, 1433, 1433, 1438, 1438, 1439, 1439, 1439, 1439, 1440, 1440, 1440, 1447, 1488, 1488, 1497, 1498, 1502, 1502, 1502, 1518, 1518 and 1587.
- SWC-103 | Pragma statements can be allowed to float when a contract is intended on lines 6.
- SWC-110 SWC-123 | It is recommended to use of revert(), assert(), and require() in Solidity, and the new REVERT opcode in the EVM on lines 1456 and 1457.
- SWC-115 | tx.origin should not be used for authorization, use msg.sender instead on lines 1349 and 1353.
- SWC-120 | It is recommended to use external sources of randomness via oracles on lines 1350 and 1353.



CONCLUSION

We have audited the Golden project released on January 2023 to discover issues and identify potential security vulnerabilities in Golden Project. This process is used to find technical issues and security loopholes which might be found in the smart contract.

The security audit report provides a satisfactory result with some low-risk issues.

The issues found in the Golden smart contract code do not pose a considerable risk. The writing of the contract is close to the standard of writing contracts in general. The low-risk issues found are some arithmetic operation issues, a floating pragma is set, weak sources of randomness, tx.origin as a part of authorization control and out of bounds array access which the index access expression can cause an exception in case of the use of an invalid array index value. We recommend avoiding "tx.origin" issue the tx.origin environment variable has been found to influence a control flow decision. Note that using "tx.origin" as a security control might cause a situation where a user inadvertently authorizes a smart contract to perform an action on their behalf. It is recommended to use "msg.sender" instead. We recommend to don't using any of those environment variables as sources of randomness and be aware that the use of these variables introduces a certain level of trust in miners.



AUDIT RESULT

Article	Category	Description	Result
Default Visibility	SWC-100 SWC-108	Functions and state variables visibility should be set explicitly. Visibility levels should be specified consciously.	PASS
Integer Overflow and Underflow	SWC-101	If unchecked math is used, all math operations should be safe from overflows and underflows.	
Outdated Compiler Version	SWC-102	It is recommended to use a recent version of the Solidity compiler.	
Floating Pragma	SWC-103	Contracts should be deployed with the same compiler version and flags that they have been tested thoroughly.	
Unchecked Call Return Value	SWC-104	The return value of a message call should be checked.	
Unprotected Ether Withdrawal	SWC-105	Due to missing or insufficient access controls, malicious parties can withdraw from the contract.	
SELFDESTRUCT Instruction	SWC-106	The contract should not be self-destructible while it has funds belonging to users.	PASS
Reentrancy	SWC-107	Check effect interaction pattern should be followed if the code performs recursive call.	PASS
Uninitialized Storage Pointer	SWC-109	Uninitialized local storage variables can point to unexpected storage locations in the contract.	
Assert Violation	SWC-110 SWC-123	Properly functioning code should never reach a failing assert statement.	ISSUE FOUND
Deprecated Solidity Functions	SWC-111	Deprecated built-in functions should never be used.	
Delegate call to Untrusted Callee	SWC-112	Delegatecalls should only be allowed to trusted addresses.	PASS



DoS (Denial of Service)	SWC-113 SWC-128	Execution of the code should never be blocked by a specific contract state unless required.	PASS
Race Conditions	SWC-114	Race Conditions and Transactions Order Dependency should not be possible.	PASS
Authorization through tx.origin	SWC-115	tx.origin should not be used for authorization.	ISSUE FOUND
Block values as a proxy for time	SWC-116	Block numbers should not be used for time calculations.	PASS
Signature Unique ID	SWC-117 SWC-121 SWC-122	Signed messages should always have a unique id. A transaction hash should not be used as a unique id.	
Incorrect Constructor Name	SWC-118		PASS
Shadowing State Variable SWC-119 State variables should not be shadowing State		State variables should not be shadowed.	PASS
Weak Sources of Randomness	SWC-120		ISSUE FOUND
Write to Arbitrary Storage Location	SWC-124 authorized user or contract accounts may write to		PASS
Incorrect Inheritance Order When inheriting multiple contracts, especially if they have identical functions, a developer should carefully specify inheritance in the correct order. The rule of thumb is to inherit contracts from more /general/ to more /specific/.		PASS	
Insufficient Gas Griefing	SWC-126 contracts which accept data and use it in a sub-call on		PASS
Arbitrary Jump Function	SWC-127	As Solidity doesnt support pointer arithmetics, it is impossible to change such variable to an arbitrary value.	PASS



Typographical Error	SWC-129	A typographical error can occur for example when the intent of a defined operation is to sum a number to a variable.	
Override control character	SWC-130	Malicious actors can use the Right-To-Left-Override unicode character to force RTL text rendering and confuse users as to the real intent of a contract.	
Unused variables	SWC-131 SWC-135		
Unexpected Ether balance	SWC-132 Contracts can behave erroneously when they strictly assume a specific Ether balance.		PASS
Hash Collisions Variable	SWC-133		PASS
Hardcoded gas amount	SWC-134		PASS
Unencrypted Private Data	SWC-136	It is a common misconception that private type variables cannot be read.	PASS



SMART CONTRACT ANALYSIS

Started	Wednesday Jan 25 2023 03:19:33 GMT+0000 (Coordinated Universal Time)		
Finished	Thursday Jan 26 2023 17:02:47 GMT+0000 (Coordinated Universal Time)		
Mode	Standard		
Main Source File	Golden.sol		

Detected Issues

ID	Title	Severity	Status
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged



SWC-101	ARITHMETIC OPERATION "%" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "%" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "%" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged



SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "**" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "**" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged



SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged



SWC-101	ARITHMETIC OPERATION "-=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-115	USE OF "TX.ORIGIN" AS A PART OF AUTHORIZATION CONTRO	L. low	acknowledged
SWC-115	USE OF "TX.ORIGIN" AS A PART OF AUTHORIZATION CONTRO	L. low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-120	POTENTIAL USE OF "BLOCK.NUMBER" AS SOURCE OF RANDOMNESS.	low	acknowledged
SWC-120	POTENTIAL USE OF "BLOCK.NUMBER" AS SOURCE OF RANDOMNESS.	low	acknowledged



LINE 390

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
unchecked {
390    _approve(sender, _msgSender(), currentAllowance - amount);
391  }
392
393    return true;
394
```



LINE 409

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
function increaseAllowance(address spender, uint256 addedValue) public virtual
returns (bool) {

409    _approve(_msgSender(), spender, _allowances[_msgSender()][spender] + addedValue);
410    return true;
411  }
412
413
```



LINE 431

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
430 unchecked {
431 _approve(_msgSender(), spender, currentAllowance - subtractedValue);
432 }
433
434 return true;
435
```



LINE 464

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
unchecked {
464   _balances[sender] = senderBalance - amount;
465  }
466   _balances[recipient] += amount;
467
468
```



LINE 466

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
465 }
466 _balances[recipient] += amount;
467
468 emit Transfer(sender, recipient, amount);
469
470
```



LINE 487

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
486
487 _totalSupply += amount;
488 _balances[account] += amount;
489 emit Transfer(address(0), account, amount);
490
491
```



LINE 488

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
__totalSupply += amount;

488 __balances[account] += amount;

489 emit Transfer(address(0), account, amount);

490

491 __afterTokenTransfer(address(0), account, amount);

492
```



LINE 513

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
512 unchecked {
513 _balances[account] = accountBalance - amount;
514 }
515 _totalSupply -= amount;
516
517
```



LINE 515

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
514  }
515  _totalSupply -= amount;
516
517  emit Transfer(account, address(0), amount);
518
519
```



LINE 611

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
610 unchecked {
611 uint256 c = a + b;
612 if (c < a) return (false, 0);
613 return (true, c);
614 }
615
```



LINE 625

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
624  if (b > a) return (false, 0);
625  return (true, a - b);
626  }
627  }
628
629
```



LINE 640

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
639 if (a == 0) return (true, 0);
640 uint256 c = a * b;
641 if (c / a != b) return (false, 0);
642 return (true, c);
643 }
644
```



LINE 641

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
640 uint256 c = a * b;

641 if (c / a != b) return (false, 0);

642 return (true, c);

643 }

644 }
```



LINE 654

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
653  if (b == 0) return (false, 0);
654  return (true, a / b);
655  }
656  }
657
658
```



LINE 666

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
665 if (b == 0) return (false, 0);
666  return (true, a % b);
667  }
668  }
669
670
```



LINE 681

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
680 function add(uint256 a, uint256 b) internal pure returns (uint256) {
681  return a + b;
682 }
683
684  /**
685
```



LINE 695

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
694 function sub(uint256 a, uint256 b) internal pure returns (uint256) {
695    return a - b;
696    }
697
698    /**
699
```



LINE 709

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
708 function mul(uint256 a, uint256 b) internal pure returns (uint256) {
709 return a * b;
710 }
711
712 /**
713
```



LINE 723

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
722 function div(uint256 a, uint256 b) internal pure returns (uint256) {
723  return a / b;
724 }
725
726  /**
727
```



LINE 739

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
738 function mod(uint256 a, uint256 b) internal pure returns (uint256) {
739 return a % b;
740 }
741
742 /**
743
```



LINE 762

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
761 require(b <= a, errorMessage);
762 return a - b;
763 }
764 }
765
766
```



LINE 785

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
784 require(b > 0, errorMessage);
785 return a / b;
786 }
787 }
788
789
```



LINE 811

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
810 require(b > 0, errorMessage);
811 return a % b;
812 }
813 }
814 }
815
```



LINE 1145

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1144
1145    uint256 totalSupply = 1_000_000_000 * 1e18;
1146
1147    maxTransactionAmount = 1_000_000_000 * 1e18; // 100% from total supply
maxTransactionAmountTxn
1148    maxWallet = 1_000_000_000 * 1e18; // 100% from total supply maxWallet
1149
```



LINE 1147

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1146
1147 maxTransactionAmount = 1_000_000_000 * 1e18; // 100% from total supply maxTransactionAmountTxn
1148 maxWallet = 1_000_000_000 * 1e18; // 100% from total supply maxWallet
1149 swapTokensAtAmount = (totalSupply * 5) / 10000; // 0.05% swap wallet
1150
1151
```



LINE 1148

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1147 maxTransactionAmount = 1_000_000_000 * 1e18; // 100% from total supply
maxTransactionAmountTxn
1148 maxWallet = 1_000_000_000 * 1e18; // 100% from total supply maxWallet
1149 swapTokensAtAmount = (totalSupply * 5) / 10000; // 0.05% swap wallet
1150
1151 buyMarketingFee = _buyMarketingFee;
1152
```



LINE 1149

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1148 maxWallet = 1_000_000_000 * 1e18; // 100% from total supply maxWallet
1149 swapTokensAtAmount = (totalSupply * 5) / 10000; // 0.05% swap wallet
1150
1151 buyMarketingFee = _buyMarketingFee;
1152 buyLiquidityFee = _buyLiquidityFee;
1153
```



LINE 1149

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1148 maxWallet = 1_000_000_000 * 1e18; // 100% from total supply maxWallet
1149 swapTokensAtAmount = (totalSupply * 5) / 10000; // 0.05% swap wallet
1150
1151 buyMarketingFee = _buyMarketingFee;
1152 buyLiquidityFee = _buyLiquidityFee;
1153
```



LINE 1154

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
buyDevFee = _buyDevFee;

buyTotalFees = buyMarketingFee + buyLiquidityFee + buyDevFee;

sellMarketingFee = _sellMarketingFee;

sellLiquidityFee = _sellLiquidityFee;

1158
```



LINE 1154

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
buyDevFee = _buyDevFee;

buyTotalFees = buyMarketingFee + buyLiquidityFee + buyDevFee;

sellMarketingFee = _sellMarketingFee;

sellLiquidityFee = _sellLiquidityFee;

1158
```



LINE 1159

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol



LINE 1159

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol



LINE 1208

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1207    require(
1208    newAmount >= (totalSupply() * 1) / 100000,
1209    "Swap amount cannot be lower than 0.001% total supply."
1210    );
1211    require(
1212
```



LINE 1208

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1207    require(
1208    newAmount >= (totalSupply() * 1) / 100000,
1209    "Swap amount cannot be lower than 0.001% total supply."
1210    );
1211    require(
1212
```



LINE 1212

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1211 require(
1212 newAmount <= (totalSupply() * 5) / 1000,
1213 "Swap amount cannot be higher than 0.5% total supply."
1214 );
1215 swapTokensAtAmount = newAmount;
1216</pre>
```



LINE 1212

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1211 require(
1212 newAmount <= (totalSupply() * 5) / 1000,
1213 "Swap amount cannot be higher than 0.5% total supply."
1214 );
1215 swapTokensAtAmount = newAmount;
1216</pre>
```



LINE 1221

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1220 require(
1221 newNum >= ((totalSupply() * 1) / 1000) / 1e18,
1222 "Cannot set maxTransactionAmount lower than 0.1%"
1223 );
1224 maxTransactionAmount = newNum * (10**18);
1225
```



LINE 1221

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1220 require(
1221 newNum >= ((totalSupply() * 1) / 1000) / 1e18,
1222 "Cannot set maxTransactionAmount lower than 0.1%"
1223 );
1224 maxTransactionAmount = newNum * (10**18);
1225
```



LINE 1221

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1220 require(
1221 newNum >= ((totalSupply() * 1) / 1000) / 1e18,
1222 "Cannot set maxTransactionAmount lower than 0.1%"
1223 );
1224 maxTransactionAmount = newNum * (10**18);
1225
```



LINE 1224

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1223 );
1224 maxTransactionAmount = newNum * (10**18);
1225 }
1226
1227 function updateMaxWalletAmount(uint256 newNum) external onlyOwner {
1228
```



LINE 1224

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1223 );
1224 maxTransactionAmount = newNum * (10**18);
1225 }
1226
1227 function updateMaxWalletAmount(uint256 newNum) external onlyOwner {
1228
```



LINE 1229

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1228    require(
1229    newNum >= ((totalSupply() * 5) / 1000) / 1e18,
1230    "Cannot set maxWallet lower than 0.5%"
1231    );
1232    maxWallet = newNum * (10**18);
1233
```



LINE 1229

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1228    require(
1229    newNum >= ((totalSupply() * 5) / 1000) / 1e18,
1230    "Cannot set maxWallet lower than 0.5%"
1231    );
1232    maxWallet = newNum * (10**18);
1233
```



LINE 1229

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1228  require(
1229  newNum >= ((totalSupply() * 5) / 1000) / 1e18,
1230  "Cannot set maxWallet lower than 0.5%"
1231  );
1232  maxWallet = newNum * (10**18);
1233
```



LINE 1232

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1231 );
1232 maxWallet = newNum * (10**18);
1233 }
1234
1235 function excludeFromMaxTransaction(address updAds, bool isEx)
1236
```



LINE 1232

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1231 );
1232 maxWallet = newNum * (10**18);
1233 }
1234
1235 function excludeFromMaxTransaction(address updAds, bool isEx)
1236
```



LINE 1255

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
buyDevFee = _devFee;
buyTotalFees = buyMarketingFee + buyLiquidityFee + buyDevFee;
require(buyTotalFees <= 11, "Must keep fees at 11% or less");
}
1257 }
1258
1259</pre>
```



LINE 1255

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
buyDevFee = _devFee;
buyTotalFees = buyMarketingFee + buyLiquidityFee + buyDevFee;
require(buyTotalFees <= 11, "Must keep fees at 11% or less");
}
1257 }
1258
1259</pre>
```



LINE 1267

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1266  sellDevFee = _devFee;
1267  sellTotalFees = sellMarketingFee + sellLiquidityFee + sellDevFee;
1268  require(sellTotalFees <= 11, "Must keep fees at 11% or less");
1269  }
1270
1271</pre>
```



LINE 1267

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1266  sellDevFee = _devFee;
1267  sellTotalFees = sellMarketingFee + sellLiquidityFee + sellDevFee;
1268  require(sellTotalFees <= 11, "Must keep fees at 11% or less");
1269  }
1270
1271</pre>
```



LINE 1367

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1366  require(
1367  amount + balanceOf(to) <= maxWallet,
1368  "Max wallet exceeded"
1369  );
1370  }
1371</pre>
```



LINE 1382

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1381    require(
1382    amount + balanceOf(to) <= maxWallet,
1383    "Max wallet exceeded"
1384    );
1385  }
1386</pre>
```



LINE 1412

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1411 lpBurnEnabled &&
1412 block.timestamp >= lastLpBurnTime + lpBurnFrequency &&
1413 !_isExcludedFromFees[from]
1414 ) {
1415 autoBurnLiquidityPairTokens();
1416
```



LINE 1431

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1430  fees = amount.mul(sellTotalFees).div(100);
1431  tokensForLiquidity += (fees * sellLiquidityFee) / sellTotalFees;
1432  tokensForDev += (fees * sellDevFee) / sellTotalFees;
1433  tokensForMarketing += (fees * sellMarketingFee) / sellTotalFees;
1434  }
1435
```



LINE 1431

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
fees = amount.mul(sellTotalFees).div(100);
tokensForLiquidity += (fees * sellLiquidityFee) / sellTotalFees;
tokensForDev += (fees * sellDevFee) / sellTotalFees;
tokensForMarketing += (fees * sellMarketingFee) / sellTotalFees;

1434 }
1435
```



LINE 1431

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
fees = amount.mul(sellTotalFees).div(100);
tokensForLiquidity += (fees * sellLiquidityFee) / sellTotalFees;
tokensForDev += (fees * sellDevFee) / sellTotalFees;
tokensForMarketing += (fees * sellMarketingFee) / sellTotalFees;

1434 }
1435
```



LINE 1432

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1431 tokensForLiquidity += (fees * sellLiquidityFee) / sellTotalFees;
1432 tokensForDev += (fees * sellDevFee) / sellTotalFees;
1433 tokensForMarketing += (fees * sellMarketingFee) / sellTotalFees;
1434 }
1435 // on buy
1436
```



LINE 1432

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1431 tokensForLiquidity += (fees * sellLiquidityFee) / sellTotalFees;
1432 tokensForDev += (fees * sellDevFee) / sellTotalFees;
1433 tokensForMarketing += (fees * sellMarketingFee) / sellTotalFees;
1434 }
1435 // on buy
1436
```



LINE 1432

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1431 tokensForLiquidity += (fees * sellLiquidityFee) / sellTotalFees;
1432 tokensForDev += (fees * sellDevFee) / sellTotalFees;
1433 tokensForMarketing += (fees * sellMarketingFee) / sellTotalFees;
1434 }
1435 // on buy
1436
```



LINE 1433

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1432 tokensForDev += (fees * sellDevFee) / sellTotalFees;
1433 tokensForMarketing += (fees * sellMarketingFee) / sellTotalFees;
1434 }
1435 // on buy
1436 else if (automatedMarketMakerPairs[from] && buyTotalFees > 0) {
1437
```



LINE 1433

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1432 tokensForDev += (fees * sellDevFee) / sellTotalFees;
1433 tokensForMarketing += (fees * sellMarketingFee) / sellTotalFees;
1434 }
1435 // on buy
1436 else if (automatedMarketMakerPairs[from] && buyTotalFees > 0) {
1437
```



LINE 1433

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1432 tokensForDev += (fees * sellDevFee) / sellTotalFees;
1433 tokensForMarketing += (fees * sellMarketingFee) / sellTotalFees;
1434 }
1435 // on buy
1436 else if (automatedMarketMakerPairs[from] && buyTotalFees > 0) {
1437
```



LINE 1438

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
fees = amount.mul(buyTotalFees).div(100);

1438    tokensForLiquidity += (fees * buyLiquidityFee) / buyTotalFees;

1439    tokensForDev += (fees * buyDevFee) / buyTotalFees;

1440    tokensForMarketing += (fees * buyMarketingFee) / buyTotalFees;

1441  }

1442
```



LINE 1438

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
fees = amount.mul(buyTotalFees).div(100);

1438    tokensForLiquidity += (fees * buyLiquidityFee) / buyTotalFees;

1439    tokensForDev += (fees * buyDevFee) / buyTotalFees;

1440    tokensForMarketing += (fees * buyMarketingFee) / buyTotalFees;

1441  }

1442
```



LINE 1438

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
fees = amount.mul(buyTotalFees).div(100);

1438    tokensForLiquidity += (fees * buyLiquidityFee) / buyTotalFees;

1439    tokensForDev += (fees * buyDevFee) / buyTotalFees;

1440    tokensForMarketing += (fees * buyMarketingFee) / buyTotalFees;

1441  }

1442
```



LINE 1439

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1438  tokensForLiquidity += (fees * buyLiquidityFee) / buyTotalFees;
1439  tokensForDev += (fees * buyDevFee) / buyTotalFees;
1440  tokensForMarketing += (fees * buyMarketingFee) / buyTotalFees;
1441  }
1442
1443
```



LINE 1439

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1438  tokensForLiquidity += (fees * buyLiquidityFee) / buyTotalFees;
1439  tokensForDev += (fees * buyDevFee) / buyTotalFees;
1440  tokensForMarketing += (fees * buyMarketingFee) / buyTotalFees;
1441  }
1442
1443
```



LINE 1439

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1438  tokensForLiquidity += (fees * buyLiquidityFee) / buyTotalFees;
1439  tokensForDev += (fees * buyDevFee) / buyTotalFees;
1440  tokensForMarketing += (fees * buyMarketingFee) / buyTotalFees;
1441  }
1442
1443
```



LINE 1440

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1439 tokensForDev += (fees * buyDevFee) / buyTotalFees;
1440 tokensForMarketing += (fees * buyMarketingFee) / buyTotalFees;
1441 }
1442
1443 if (fees > 0) {
1444
```



LINE 1440

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1439 tokensForDev += (fees * buyDevFee) / buyTotalFees;
1440 tokensForMarketing += (fees * buyMarketingFee) / buyTotalFees;
1441 }
1442
1443 if (fees > 0) {
1444
```



LINE 1440

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1439 tokensForDev += (fees * buyDevFee) / buyTotalFees;
1440 tokensForMarketing += (fees * buyMarketingFee) / buyTotalFees;
1441 }
1442
1443 if (fees > 0) {
1444
```



LINE 1447

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1446
1447   amount -= fees;
1448  }
1449
1450   super._transfer(from, to, amount);
1451
```



LINE 1488

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1487  uint256 contractBalance = balanceOf(address(this));
1488  uint256 totalTokensToSwap = tokensForLiquidity +
1489  tokensForMarketing +
1490  tokensForDev;
1491  bool success;
1492
```



LINE 1488

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1487  uint256 contractBalance = balanceOf(address(this));
1488  uint256 totalTokensToSwap = tokensForLiquidity +
1489  tokensForMarketing +
1490  tokensForDev;
1491  bool success;
1492
```



LINE 1497

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1496
1497 if (contractBalance > swapTokensAtAmount * 20) {
1498  contractBalance = swapTokensAtAmount * 20;
1499  }
1500
1501
```



LINE 1498

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
if (contractBalance > swapTokensAtAmount * 20) {
1498    contractBalance = swapTokensAtAmount * 20;
1499  }
1500
1501  // Halve the amount of liquidity tokens
1502
```



LINE 1502

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1501  // Halve the amount of liquidity tokens
1502  uint256 liquidityTokens = (contractBalance * tokensForLiquidity) /
1503  totalTokensToSwap /
1504  2;
1505  uint256 amountToSwapForETH = contractBalance.sub(liquidityTokens);
1506
```



LINE 1502

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1501  // Halve the amount of liquidity tokens
1502  uint256 liquidityTokens = (contractBalance * tokensForLiquidity) /
1503  totalTokensToSwap /
1504  2;
1505  uint256 amountToSwapForETH = contractBalance.sub(liquidityTokens);
1506
```



LINE 1502

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1501  // Halve the amount of liquidity tokens
1502  uint256 liquidityTokens = (contractBalance * tokensForLiquidity) /
1503  totalTokensToSwap /
1504  2;
1505  uint256 amountToSwapForETH = contractBalance.sub(liquidityTokens);
1506
```



LINE 1518

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1517
1518 uint256 ethForLiquidity = ethBalance - ethForMarketing - ethForDev;
1519
1520 tokensForLiquidity = 0;
1521 tokensForMarketing = 0;
1522
```



LINE 1518

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1517
1518 uint256 ethForLiquidity = ethBalance - ethForMarketing - ethForDev;
1519
1520 tokensForLiquidity = 0;
1521 tokensForMarketing = 0;
1522
```



LINE 1587

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- Golden.sol

```
1586 require(
1587 block.timestamp > lastManualLpBurnTime + manualBurnFrequency,
1588 "Must wait for cooldown to finish"
1589 );
1590 require(percent <= 1000, "May not nuke more than 10% of tokens in LP");
1591
```



SWC-103 | A FLOATING PRAGMA IS SET.

LINE 6

low SEVERITY

The current pragma Solidity directive is ""=0.8.10>=0.8.10>=0.8.0<0.9.0"". It is recommended to specify a fixed compiler version to ensure that the bytecode produced does not vary between builds. This is especially important if you rely on bytecode-level verification of the code.

Source File

- Golden.sol

```
5  // SPDX-License-Identifier: MIT
6  pragma solidity =0.8.10 >=0.8.10 >=0.8.0 <0.9.0;
7  pragma experimental ABIEncoderV2;
8
9  // GOLDEN Smart Contract
10</pre>
```



SWC-115 | USE OF "TX.ORIGIN" AS A PART OF AUTHORIZATION CONTROL.

LINE 1349

low SEVERITY

The tx.origin environment variable has been found to influence a control flow decision. Note that using "tx.origin" as a security control might cause a situation where a user inadvertently authorizes a smart contract to perform an action on their behalf. It is recommended to use "msg.sender" instead.

Source File

- Golden.sol

```
1348 require(
1349 _holderLastTransferTimestamp[tx.origin] <
1350 block.number,
1351 "_transfer:: Transfer Delay enabled. Only one purchase per block allowed."
1352 );
1353
```



SWC-115 | USE OF "TX.ORIGIN" AS A PART OF AUTHORIZATION CONTROL.

LINE 1353

low SEVERITY

Using "tx.origin" as a security control can lead to authorization bypass vulnerabilities. Consider using "msg.sender" unless you really know what you are doing.

Source File

- Golden.sol

```
1352 );
1353 _holderLastTransferTimestamp[tx.origin] = block.number;
1354 }
1355 }
1356
1357
```



SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 1456

low SEVERITY

The index access expression can cause an exception in case of use of invalid array index value.

Source File

- Golden.sol

```
1455  address[] memory path = new address[](2);
1456  path[0] = address(this);
1457  path[1] = uniswapV2Router.WETH();
1458
1459  _approve(address(this), address(uniswapV2Router), tokenAmount);
1460
```



SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 1457

low SEVERITY

The index access expression can cause an exception in case of use of invalid array index value.

Source File

- Golden.sol

```
1456  path[0] = address(this);
1457  path[1] = uniswapV2Router.WETH();
1458
1459  _approve(address(this), address(uniswapV2Router), tokenAmount);
1460
1461
```



SWC-120 | POTENTIAL USE OF "BLOCK.NUMBER" AS SOURCE OF RANDOMNESS.

LINE 1350

low SEVERITY

The environment variable "block.number" looks like it might be used as a source of randomness. Note that the values of variables like coinbase, gaslimit, block number and timestamp are predictable and can be manipulated by a malicious miner. Also keep in mind that attackers know hashes of earlier blocks. Don't use any of those environment variables as sources of randomness and be aware that use of these variables introduces a certain level of trust into miners.

Source File

- Golden.sol

```
__holderLastTransferTimestamp[tx.origin] <
1350    block.number,
1351    "_transfer: Transfer Delay enabled. Only one purchase per block allowed."
1352    );
1353    _holderLastTransferTimestamp[tx.origin] = block.number;
1354
```



SWC-120 | POTENTIAL USE OF "BLOCK.NUMBER" AS SOURCE OF RANDOMNESS.

LINE 1353

low SEVERITY

The environment variable "block.number" looks like it might be used as a source of randomness. Note that the values of variables like coinbase, gaslimit, block number and timestamp are predictable and can be manipulated by a malicious miner. Also keep in mind that attackers know hashes of earlier blocks. Don't use any of those environment variables as sources of randomness and be aware that use of these variables introduces a certain level of trust into miners.

Source File

- Golden.sol

```
1352 );
1353 _holderLastTransferTimestamp[tx.origin] = block.number;
1354 }
1355 }
1356
1357
```



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