

# Homework 1

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## Modified MyToken.sol

## Code and Deployment

The image shows a Solidity IDE with the file `MyToken.sol` open. The code defines a contract `ShravyaToken` that inherits from `ERC20`, `Ownable`, and `ERC20Permit`. It includes a constructor and a `mint` function.

```
1 // SPDX-License-Identifier: MIT
2 pragma solidity ^0.8.20;
3
4 import "@openzeppelin/contracts/token/ERC20/ERC20.sol";
5 import "@openzeppelin/contracts/access/Ownable.sol";
6 import "@openzeppelin/contracts/token/ERC20/extensions/ERC20Permit.sol";
7
8 contract ShravyaToken is ERC20, Ownable, ERC20Permit {
9     constructor(address initialOwner) {
10         ERC20("ShravyaToken", "MTK")
11         Ownable(initialOwner)
12         ERC20Permit("ShravyaToken")
13     }
14
15     function mint(address to, uint256 amount) public onlyOwner {
16         _mint(to, amount);
17     }
18 }
19
```

Below the code editor, the deployment details are shown. The transaction is successful, and the contract address is `0xc577af5748ea9dc908b8256351a0e91b846d87d2`.

0 ☐ Listen on all transactions

[view on etherscan](#)

status 0x1 Transaction mined and execution succeed

transaction hash 0xcee5fab33fffa074ba3161b3c69bc39e270be679e1a78b5b27d277d15a031e1

block hash 0x2b97f7a4eaf6f121594f377319c465e045001b88645388ddb8e84ed7719c749

block number 5651282

contract address 0xc577af5748ea9dc908b8256351a0e91b846d87d2

from 0x313239688e75c29aa90d31a5b26937b224d5108e

Debug

## Minting

CONTRACT VERIFICATION -  
ETHERSCAN

Verify Smart Contracts

Selected Network

Sepolia (Chain id: 11155111)

Contract Name

ShravyaToken

Contract Address

0xc577af5748ea9dc908b8256351a0e91

☐ It's a proxy contract address

Verify

Generate Verification Scripts

Verification request submitted successfully. Use  
this receipt GUID  
2rdmkrhsftx8ffxrjinsszehnw4pp1zzymhrlvvn2xvdqj  
to track the status of your submission

## Transaction History

sepolia.etherscan.io/tx/0xcee5fab33ffca074ba3161b3c69bc39e270be679e1a78b5b27d277d15a031e1

Search by Address / Txn Hash / Block / Token

Etherscan

Home Blockchain Tokens NFTs Misc

Transaction Details

Overview Logs (1) State

[ This is a Sepolia Testnet transaction only ]

Transaction Hash:

0xcee5fab33ffca074ba3161b3c69bc39e270be679e1a78b5b27d277d15a031e1

Status:

Success

Block:

5651282 77 Block Confirmations

Timestamp:

17 mins ago (Apr-08-2024 02:05:36 AM +UTC)

Transaction Action:

Call 0x51018060 Method by 0x31323968...224D5108E

From:

0x313239688E75C29a90d31a5b26937b224D5108E

To:

[ 0xc577af5748ea9dc908b8256351a0e91b846d87d2 Created ]

Value:

0 ETH (\$0.00)

Transaction Fee:

0.002768053973561657 ETH (\$0.00)

Gas Price:

1.500584107 Gwei (0.000000001500584107 ETH)

More Details:

+ Click to show more

[https://sepolia.etherscan.io/@ContentPlaceHolder1\\_collapseContent](https://sepolia.etherscan.io/@ContentPlaceHolder1_collapseContent) that changes the blockchain state. Block explorers track the details of all transactions in the network. Learn more about transactions in our [Knowledge Base](#).

Etherscan

HomeBlockchainTokensNFTsMisc

Contract0xC577aF5748eA9dC908B8256351A0E91b846D87D2

Overview

ETH BALANCE  
0 ETH

More Info

CONTRACT CREATOR  
0x31323968...224D5108E at txn 0xcee5fab33fff...

Multichain Info

N/A

Transactions

Token Transfers (ERC-20)ContractEvents

Latest 1 from a total of 1 transactions

Download Page Data

Transaction Hash	Method	Block	Age	From	To	Value	Txn Fee
0xcee5fab33fff...	0x61016060	5651282	18 mins ago	0x31323968...224D5108E	Contract Creation	0 ETH	0.00276805

[Download: CSV Export]

A contract address hosts a smart contract, which is a set of code stored on the blockchain that runs when predetermined conditions are met. Learn more about addresses in our Knowledge Base.

Link to etherscan

<https://sepolia.etherscan.io/tx/0xcee5fab33ffca074ba3161b3c69bc39e270be679e1a78b5b27d277d15a031e1>