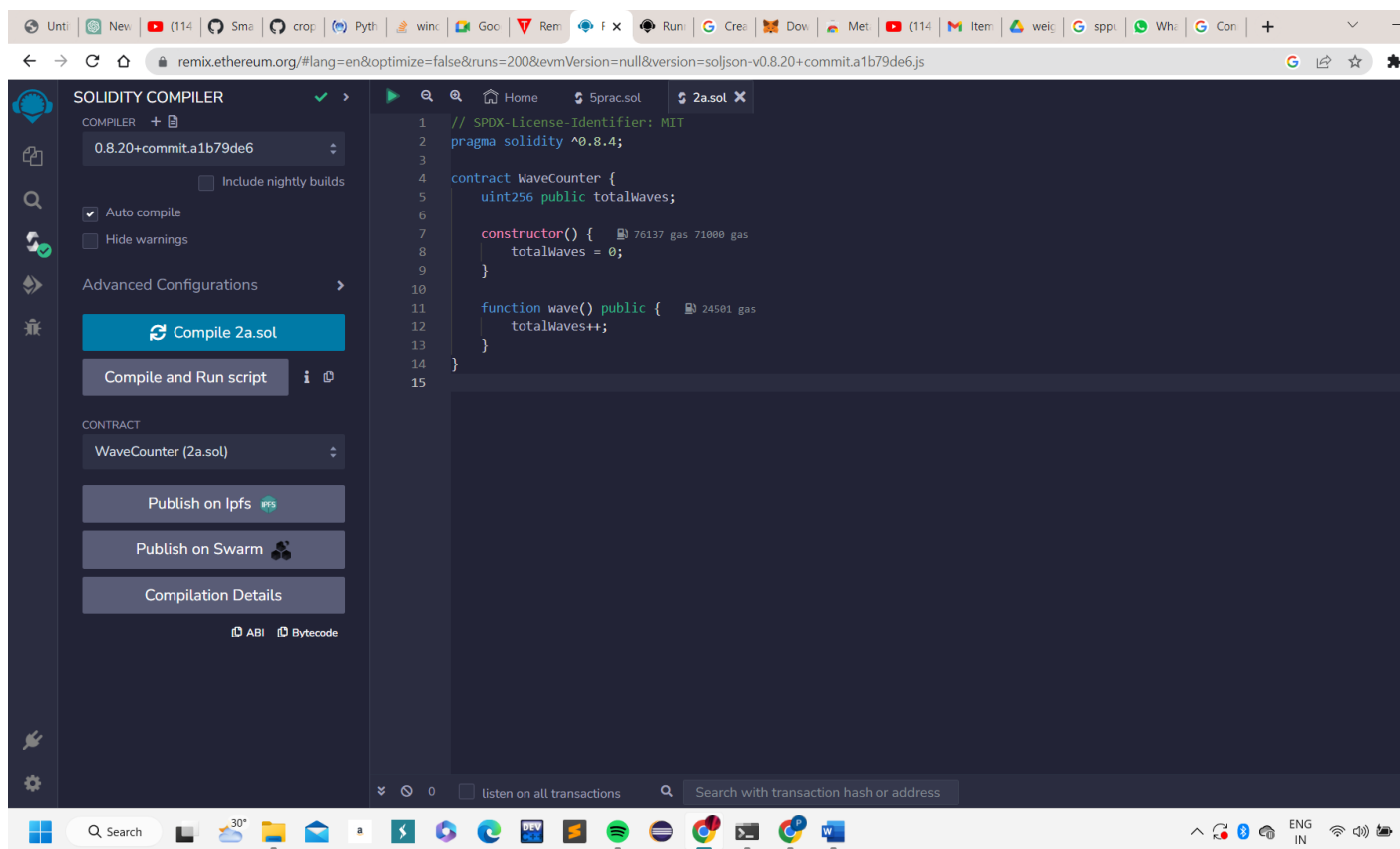


Assignment No.2

- 1) Create a local Ethereum network using Hardhat or any other tool, build a smart contract that lets you send a 🌊 (wave) to your contract and keep track of the total # of waves. Compile it to run locally.
- 2) Connect to any Ethereum wallet eg. Metamask. Deploy the contract with testnet. Connect wallet with your webapp. Call the deployed contract through your web app. Then store the wave messages from users in arrays using structs.



remix.ethereum.org/#lang=en&optimize=false&runs=200&evmVersion=null&version=soljson-v0.8.20+commit.a1b79de6.js

DEPLOY & RUN TRANSACTIONS ✓

WaveCounter - contracts/2a.sol

Deploy

☐ Publish to IPFS

OR

At Address

Transactions recorded 11

☐ Run transactions using the latest compilation result

Save Run

Deployed Contracts

WAVECOUNTER AT 0x7EF...8CB4

Balance: 0 ETH

wave

totalWaves

0: uint256: 2

Low level interactions

CALLDATA

5prac.sol 2a.sol

```
1 // SPDX-License-Identifier: MIT
2 pragma solidity ^0.8.4;
3
4 contract WaveCounter {
5     uint256 public totalWaves;
6
7     constructor() {
8         totalWaves = 0;
9     }
10
11     function wave() public {
12         totalWaves++;
13     }
14 }
15
```

listen on all transactions

Search with transaction hash or address

CALL [call] from: 0x5B38Da6a701c568545dCfcB03FcB875f56beddC4 to: WaveCounter.totalWaves() data: 0x291...bcab3

from

0x5B38Da6a701c568545dCfcB03FcB875f56beddC4

to

WaveCounter.totalWaves() 0x7EF2e0048f5bAe046f68F797943daF4ED08CB47

execution cost

2482 gas (Cost only applies when called by a contract)

input

0x291...bcab3

decoded input

()

decoded output

{ "0": "uint256: 2" }

logs

Search

30°

ENG IN