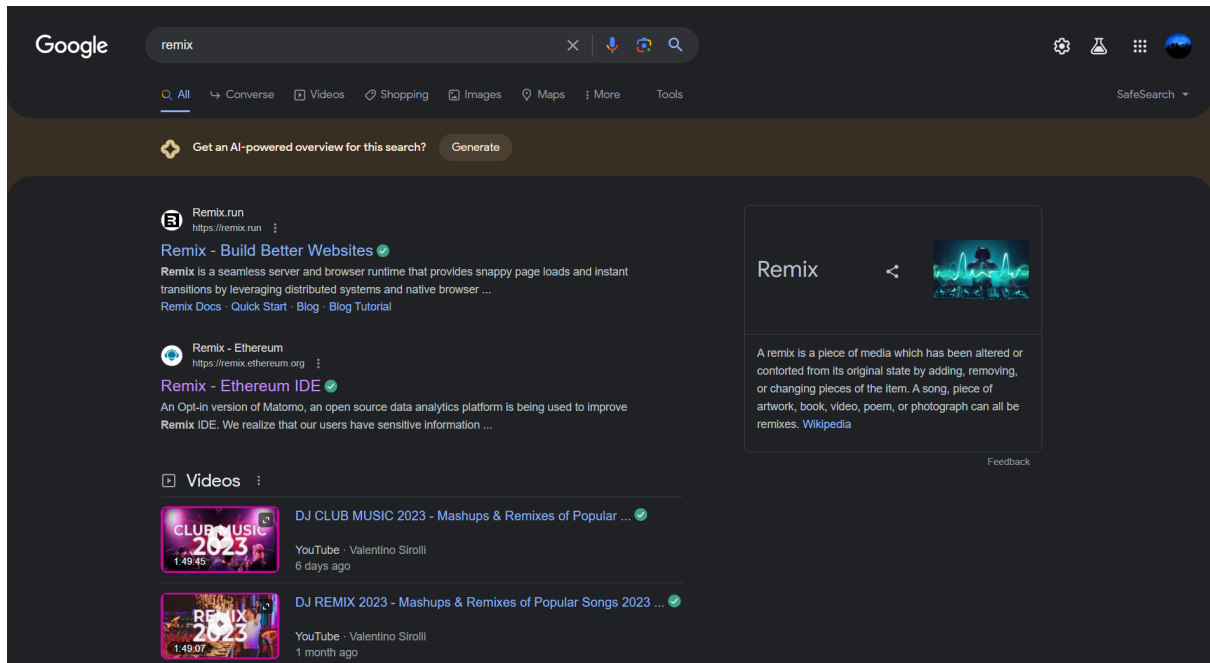# Priya.A

NM Id - 060CA4A184ADC90839F4FF85BB9EDA29

Block Chain Assignment

Sri Raaja Raajan College of Engineering and Technology

1. <u>Go to chrome and open the Remix platform.</u>

2. <u>Open the remix page and create a new file.</u>
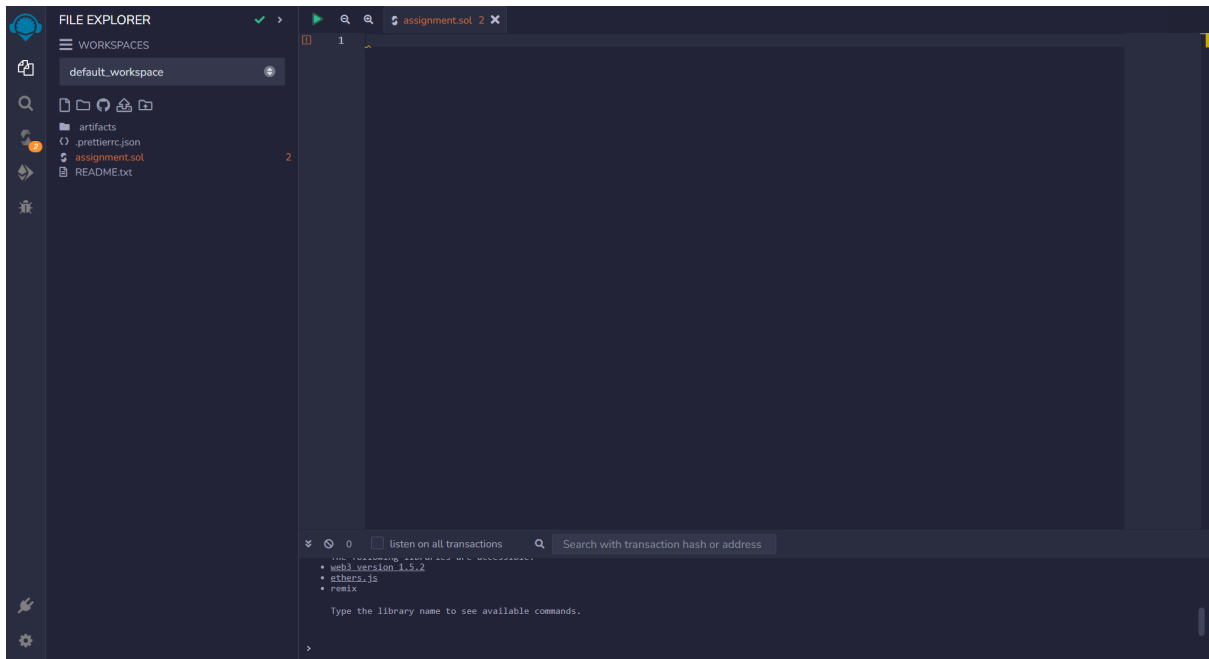
3. Create a contract to return your "Zone Name".


```solidity
// SPDX-License-Identifier: MIT
pragma solidity ^0.8.10;

contract zoneContract {
    function zone(string memory zoneName) public pure returns(string memory){
        return zoneName;
    }
}
```
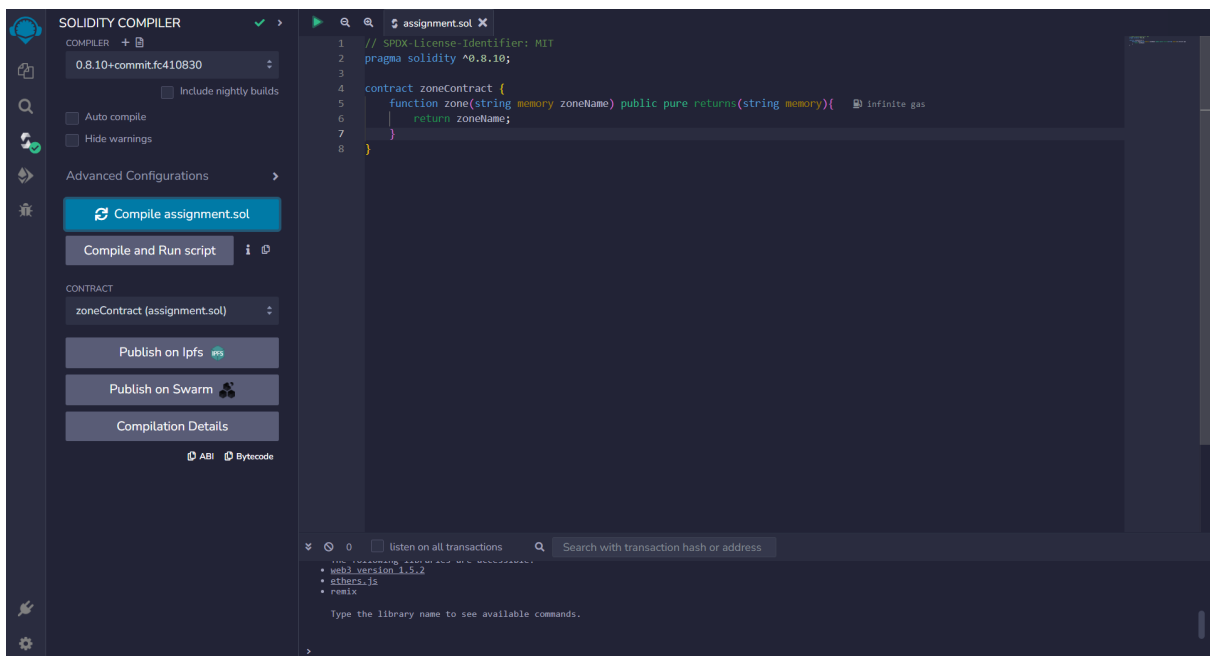
4. Compile the contract to get ABI and BYTECODE.
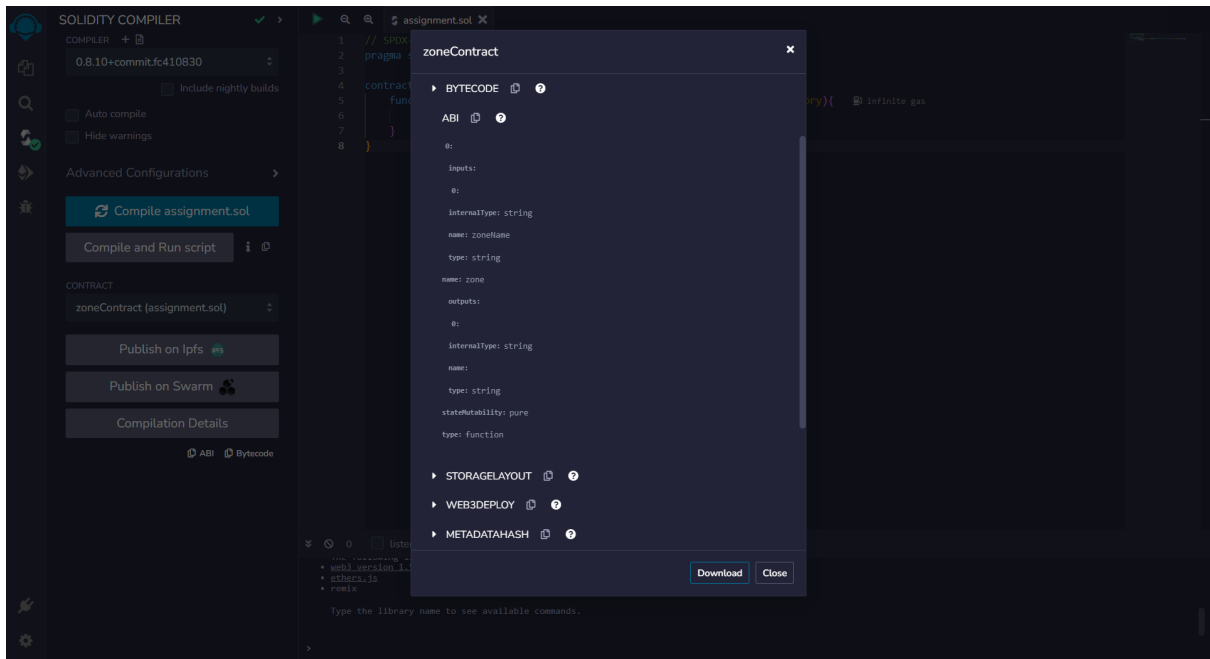
5. <u>Deploy the contract to display the output.</u>

DEPLOY & RUN TRANSACTIONS

ENVIRONMENT
Remix VM (Shanghai)
VM

ACCOUNT
0x5B3...eddC4 (99.9999999

GAS LIMIT
3000000

VALUE
0   Wei

CONTRACT
zoneContract - assignment.sol
evm version: london
Deploy
Publish to IPFS

At Address   Load contract from Address

Transactions recorded 1

Deployed Contracts
ZONECONTRACT AT 0XD91...3913

```solidity
// SPDX-License-Identifier: MIT
pragma solidity ^0.8.10;

contract zoneContract {
    function zone(string memory zoneName) public pure returns(string memory){    infinite gas
        return zoneName;
    }
}
```

listen on all transactions
Search with transaction hash or address

[vm] from: 0x5B3...eddC4 to: zoneContract.(constructor) value: 0 wei data: 0x608...a0033 logs: 0 hash: 0x13f...23e30   Debug

---

DEBUGGER

Use generated sources(Solidity >= v0.7.2)

0x13f602ec4eb87c5e494f71987484f30ff46f2f933186222d7fe0da5eb2b23e30

Stop debugging

Function Stack
No data available

Solidity State
No data available

Solidity Locals
No data available

```
000 PUSH1 80 - LINE 4
002 PUSH1 40 - LINE 4
004 MSTORE - LINE 4
005 CALLVALUE - LINE 4
006 DUP1 - LINE 4
007 ISZERO - LINE 4
008 PUSH2 0010 - LINE 4
011 JUMPI - LINE 4
```

Step details
vm trace step: 0
execution step: 0
add memory:
gas: 3
remaining gas: 182123
loaded address: (Contract Creation - Step 0)

Call Stack
0: (Contract Creation - Step 0)

Full Storage Changes
(Contract Creation - Step 0): Object

Stack
No data available

Call Data
0: 0x608060405234801561001057600080f
d5b506102ed80610020600039600003fe
608060405234801561001057600080fd5
b50600436101002b5760003560e01c80
631821fcab1461003057b600080fd5b61
004a600480360381019061004591906101
01c4565b610060565b60405161005791
90610295565b60405180910390f35b606
```

listen on all transactions
Search with transaction hash or address

[vm] from: 0x5B3...eddC4 to: zoneContract.(constructor) value: 0 wei data: 0x608...a0033 logs: 0 hash: 0x13f...23e30    Debug

```solidity
// SPDX-License-Identifier: MIT
pragma solidity ^0.8.10;

contract zoneContract {    PUSH1 costs 3 gas - this line costs 1960 gas - 182123 gas left
    function zone(string memory zoneName) public pure returns(string memory){    infinite
        return zoneName;
    }
}
```