

ASSIGNMENT-1

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PROGRAM :

```
pragma solidity >= 0.8.2 <0.9.0;

contract Hello World
{
    string user Input;

    function set(string memory final Value) public
    {
        User Input = final Value;
    }

    function get() public view returns(string memory)
    {
        return user Input;
    }
}
```

ABI :

```
[
  {
    "inputs": [
      {
        "internal Type": "string",
        "name": "final Value",
        "type": "string"
      }
    ]
  }
]
```

```

    }
  ],
  "name": "set",
  "outputs": [],
  "state Mutability": "non payable",
  "type": "function"
},
{
  "inputs": [],
  "name": "get",
  "outputs": [
    {
      "internal Type": "string",
      "name": "",
      "type": "string"
    }
  ],
  "state Mutability": "view",
  "type": "function"
}
]

```

BYTE CODE :

```

608060405234801561001057600080fd5b506103a4806100206000396000f3fe6080604052348015610010576000
80fd5b50600436106100365760003560e01c80634ed3885e1461003b5780636d4ce63c14610050575b600080fd5b
61004e610049366004610126565b61006e565b005b61005861007e565b60405161006591906101d7565b604051
80910390f35b600061007a82826102ae565b5050565b60606000805461008d90610225565b80601f01602080910
402602001604051908101604052809291908181526020018280546100b990610225565b80156101065780601f10
6100db57610100808354040283529160200191610106565b820191906000526020600020905b815481529060010
1906020018083116100e957829003601f168201915b5050505050905090565b634e487b7160e01b600052604160
045260246000fd5b60006020828403121561013857600080fd5b813567ffffffffffff8082111561015057600080fd
5b818401915084601f83011261016457600080fd5b81358181111561017657610176610110565b604051601f8201
601f19908116603f0116810190838211818310171561019e5761019e610110565b81604052828152876020848701
0111156101b757600080fd5b8260208601602083013760009281016020019290925250959450505050565b600
060208083528351808285015260005b81811015610204578581018301518582016040015282016101e8565b5060
00604082860101526040601f19601f8301168501019250505092915050565b600181811c9082168061023957607f
821691505b60208210810361025957634e487b7160e01b600052602260045260246000fd5b50919050565b601f8
211156102a957600081815260208120601f850160051c810160208610156102865750805b601f850160051c82019
1505b818110156102a557828155600101610292565b5050505b505050565b815167ffffffffffff8111156102c857
6102c8610110565b6102dc816102d68454610225565b8461025f565b602080601f83116001811461031157600084
156102f95750858301515b600019600386901b1c1916600185901b1785556102a5565b600085815260208120601f
198616915b828110156103405788601518255948401946001909101908401610321565b508582101561035e578

```

7850151600019600388901b60f8161c191681555b50505050600190811b0190555056fea264697066735822122067710e5ec20960cba1255f9c6ba86d82a17a98eced54d30401b82ef1cc435e0164736f6c63430008120033

OUTPUT :

The screenshot displays the Remix IDE interface, which is used for developing and interacting with Ethereum smart contracts. The interface is divided into several panels:

- Left Panel (Deploy & Run Transactions):** This panel contains options for running transactions, a 'Save' button, and a 'Run' button. It also shows a list of 'Deployed Contracts', including 'HELLOWORLD AT 0XD91...3913E'. Below this, there is a section for 'HELLOWORLD AT 0X358...D5EE' with a balance of 0 ETH. It includes a 'set' button for 'string finalValue' and a 'get' button. The 'Low level interactions' section shows 'CALLDATA' and a 'Transact' button.
- Center Panel (Code Editor):** This panel displays the source code of the 'HelloWorld' contract. The code is as follows:

```
3 contract HelloWorld { PUSH1 costs 3 gas - this line costs 2320 gas - 224741 gas left
4 {
5
6     string userInput;
7
8     function set(string memory finalValue) public { infinite gas
9     {
10         userInput = finalValue;
11     }
12
13     function get() public view returns(string memory) { infinite gas
14     {
15         return userInput;
16     }
17 }
```
- Right Panel (Transaction Log):** This panel shows the details of a transaction. It includes a search bar for 'Search with transaction hash or address'. The transaction details are as follows:
 - from: 0x58380a6a701c568545dcfc803fc8875f56bedc4
 - to: HelloWorldId.get() 0x358AA13c52544ECCEf688AD0F801012ADAD5e3
 - execution cost: 2922 gas (Cost only applies when called by a contract)
 - Input: 0x6d4...ce63c
 - decoded Input: {}
 - decoded output: {"0": "string: "}