

# ***Solidity programming***

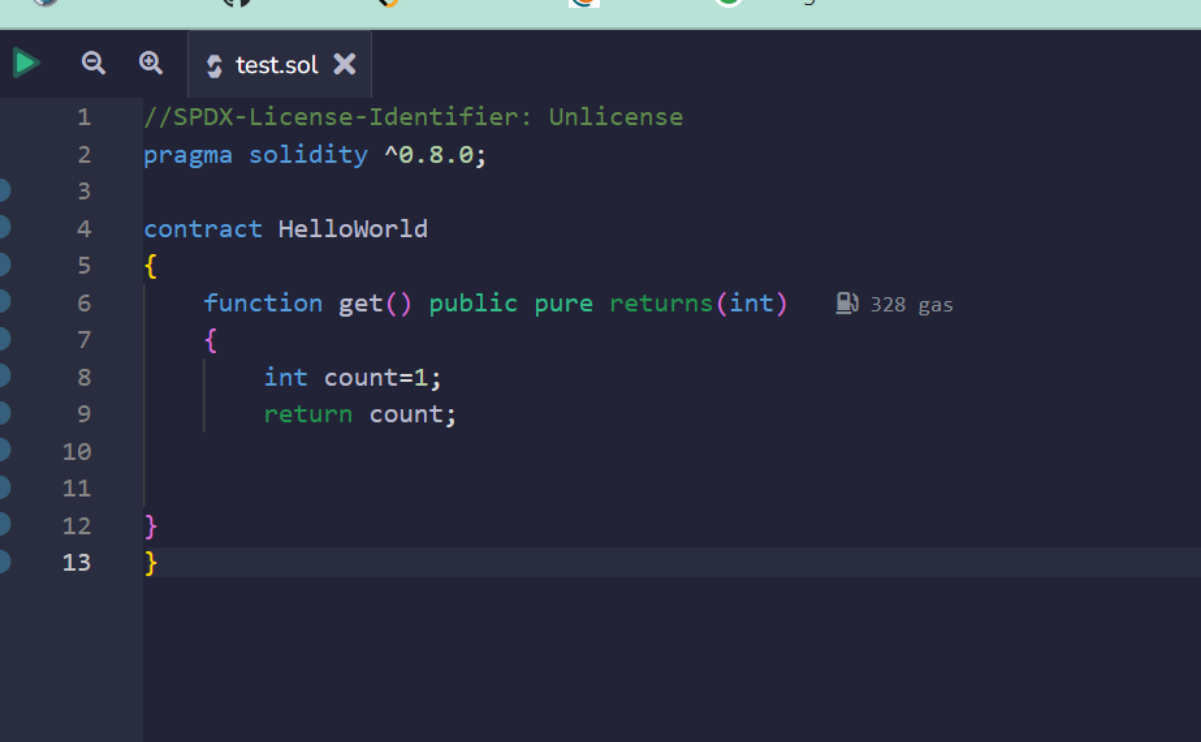
Contact - similar to class supports inheritance

## **Prog-1 Hello world**

```
pragma solidity >= 0.8.2 <0.9.0;
```

```
contract HelloWorld {  
    function get()public pure returns (string memory){  
        return 'Hello Contracts';  
    }  
}
```

## **Prog 2**

A screenshot of a code editor window titled 'test.sol'. The editor shows Solidity code for a 'HelloWorld' contract. The code is as follows:

```
1 //SPDX-License-Identifier: Unlicense  
2 pragma solidity ^0.8.0;  
3  
4 contract HelloWorld  
5 {  
6     function get() public pure returns(int) 328 gas  
7     {  
8         int count=1;  
9         return count;  
10    }  
11  
12 }  
13 }
```

The code is color-coded: comments are green, keywords like 'pragma', 'contract', 'function', 'public', 'pure', 'returns', 'int', and 'return' are blue, and string literals are red. Line numbers 1 through 13 are visible on the left side of the editor.

## Prog 3

```
1 //SPDX-License-Identifier: Unlicense
2 pragma solidity ^0.8.0;
3
4 contract Twitter {
5
6     // add our code
7     mapping(address => string) public tweets;
8
9     function createTweet(string memory _tweet) public {
10         tweets[msg.sender] = _tweet;
11     }
12     function getTweet(address _owner) public view returns(string memory) {
13         return tweets[_owner];
14     }
15 }
16
```

## Prog-4

```
//SPDX-License-Identifier: Unlicense
pragma solidity ^0.8.0;

contract Twitter {

    // add our code
    mapping(address => string[]) public tweets;

    function createTweet(string memory _tweet) public {
        tweets[msg.sender].push(_tweet);
    }

    function getTweet(address payable _owner) public view
returns(string[] memory) {
        return tweets[_owner];
    }
}
```

## Prog 5

```
pragma solidity ^0.8.0;

contract HelloWorld{
    struct Student{
        string Name;
        string Rollno;
        string Class;
    }
    Student[] public students;
    function add(string memory Name,uint)
    {

        Student memory s1;
        ... }
        ... Student.push(s1);
        ... }
    }
```