

## **Q) Remove array element by shifting elements from right to left remove(n)**

```
// SPDX-License-Identifier: MIT  
pragma solidity ^0.8.3;
```

```
contract ArrayManipulation {  
    uint[] public data;  
  
    // Function to add elements to the array (for testing purposes)  
    function addElement(uint element) public {  
        data.push(element);  
    }  
  
    // Function to remove an element at the specified index by shifting elements  
    function remove(uint index) public {  
        require(index < data.length, "Index out of bounds");  
  
        for (uint i = index; i < data.length - 1; i++) {  
            data[i] = data[i + 1];  
        }  
        data.pop();  
    }  
  
    // Function to get the array length  
    function getLength() public view returns (uint) {  
        return data.length;  
    }  
  
    // Function to get the entire array (for testing purposes)  
    function getData() public view returns (uint[] memory) {  
        return data;  
    }  
}
```

Output for example:

```
// [1, 2, 3] -- remove(1) --> [1, 3, 3] --> [1, 3]
```

