```
// SPDX-License-Identifier: GPL-3.0
pragma solidity >= 0.8.0 < 0.9.0;
contract practice
    //state variables/Identifier...
    // string name = "Madan";
    // uint age = 21;
    //getName function
    // function getName() view public returns(string memory)
    // {
    //
           return name;
    // }
    //getAge function
    // function getAge() view public returns(uint)
    // {
    //
           return age;
    // }
    //setAge function with parameter
    // function setAge(uint newage) public
    // {
    //
           age = newage;
    // }
    //Method#01
    // function setName() public
    // {
   //
           name = "Madan Lal";
    // }
    //Method#02
    // constructor() public
    // {
    //
           name = "LS Madan";
    //
           age = 22;
    // }
    //Age Increment function
    // function Age Increment() public
    // {
    //
           age = age+1;
    // }
    // function store() pure public returns(uint)
    // {
    //
           //local variables
           string memory Name = "ali";
    //
```

```
//
          uint Age = 45;
    //
          return Age;
    // }
        // uint[4] public arr = [10,20,30,40];
    //array setter function
    // function arrSetter(uint index, uint value) public
    // {
    //
          arr[index] = value;
    // }
    //array length function
    // function arrLength() public view returns(uint)
    // {
          return arr.length;
    //
    // }
    //dynamic array
    // uint[] public arr;
    // function pushElelement(uint item) public
    // {
    //
           arr.push(item);
    // }
    // function arrLenght() view public returns(uint)
    // {
    //
          return arr.length;
    // }
    // function popElement() view public
    // {
    //
           arr.pop;
    // }
    //bytes array
    // bytes2 public b2;
    // bytes3 public b3;
    // function setter() public
    // {
                           //0x6162
    //
         b2 = 'ab';
    //
          b3 = 'abc';
                           //0x616263
          //b3 = 'ab';
    //
                           //0x616200
    // }
// uint[3] public arr;
// uint public count;
// function loop() public
// {
```

```
//while loop
   // while(count<arr.length)</pre>
   // {
   //
          arr[count] = count;
   //
          count++;
   // }
   // for loop
   // for(uint i=count; i<arr.length; i++)</pre>
   // {
   //
          arr[count] = count;
   //
        count++;
   // }
   //do while loop
   // do{
   //
        arr[count] = count;
   //
        count++;
   // }while(count<arr.length);</pre>
// }
//if else
function check(int a) public pure returns(string memory)
// {
//
       string memory value;
//
      if(a>0)
//
      {
//
          value = "value is greater than zero";
//
//
      else if(a==0)
//
//
          value = "value is equal to zero";
//
      }
//
      else
//
      {
//
          value = "value is less than zero";  //take a as int
//
// return value;
// }
}
//SPDX-License-Identifier: GPL-3.0
pragma solidity >= 0.8.0 <0.9.0;</pre>
```

```
struct Student{
   uint rollNo;
   string name;
}
contract Demo
   Student public s1;
   constructor() {
      s1.rollNo = 1;
      s1.name= "Madan";
   }
   function change (uint rollNo, string memory name) public
      Student memory new student=Student({
         rollNo : rollNo,
         name : name
      });
      s1 = new student;
   }
}
//SPDX-License-Identifier: GPL-3.0
pragma solidity \geq 0.8.0 < 0.9.0;
contract demo {
   //accessing global data
   function getter() public view returns(uint blockNumber, uint
timestamp, address msgSender)
   {
      return(block.number, block.timestamp, msg.sender);
   }
}
//SPDX-License-Identifier: GPL-3.0
```

```
pragma solidity >=0.8.0 < 0.9.0;

contract transaction {
    address payable user =
    payable(0x5B38Da6a701c568545dCfcB03FcB875f56beddC4);

    function payEther() public payable
    {
        public payable
        return address(this).balance;
        }

        function sendEtherAccount() public
        {
            user.transfer(4 ether);
        }
}</pre>
```