

2) Write a Smart Contract for understanding value types in Solidity

Ans.

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

contract ValueTypeDemo {
    // State variables
    uint256 public uintVariable;
    int256 public intVariable;
    address public addressVariable;
    bool public boolVariable;
    string public stringVariable;
    bytes32 public bytesVariable;

    // Constructor to initialize state variables
    constructor() {
        uintVariable = 10;
        intVariable = -5;
        addressVariable = msg.sender;
        boolVariable = true;
        stringVariable = "Hello, World!";
        bytesVariable = keccak256(abi.encodePacked("Solidity"));
    }

    // Function to update uintVariable
    function updateUint(uint256 newValue) public {
        uintVariable = newValue;
    }

    // Function to update intVariable
    function updateInt(int256 newValue) public {
        intVariable = newValue;
    }

    // Function to update addressVariable
```

