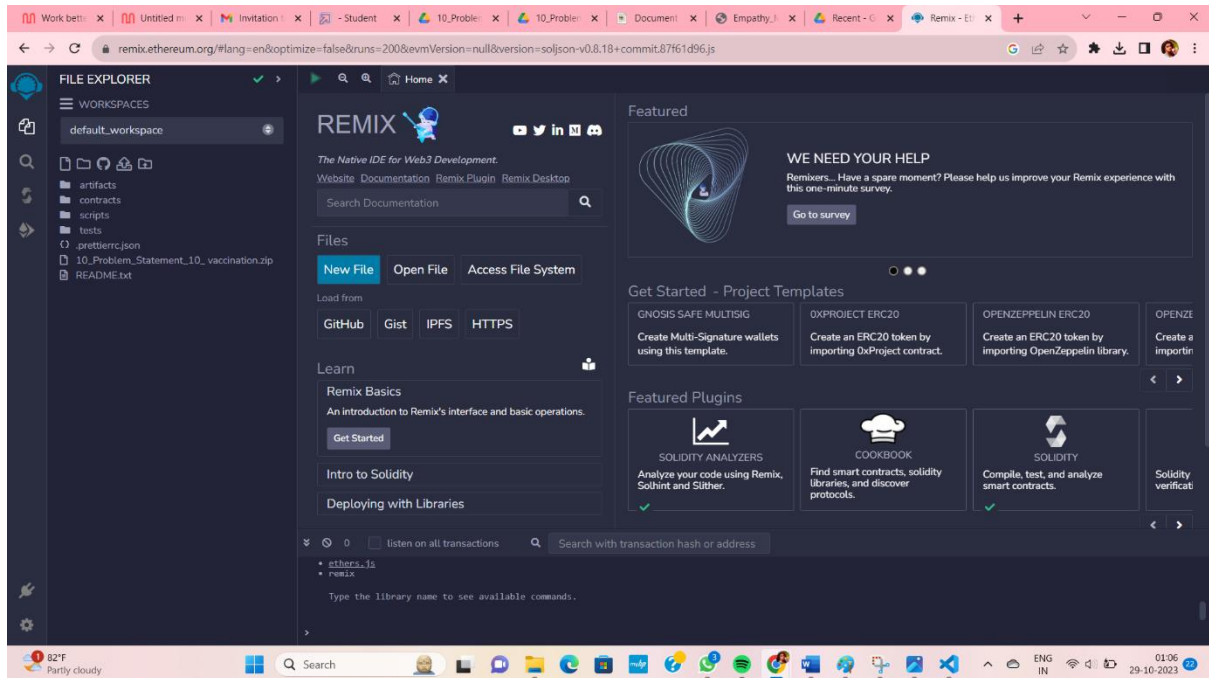


# IMPLEMENTATION USING REMIX IDE

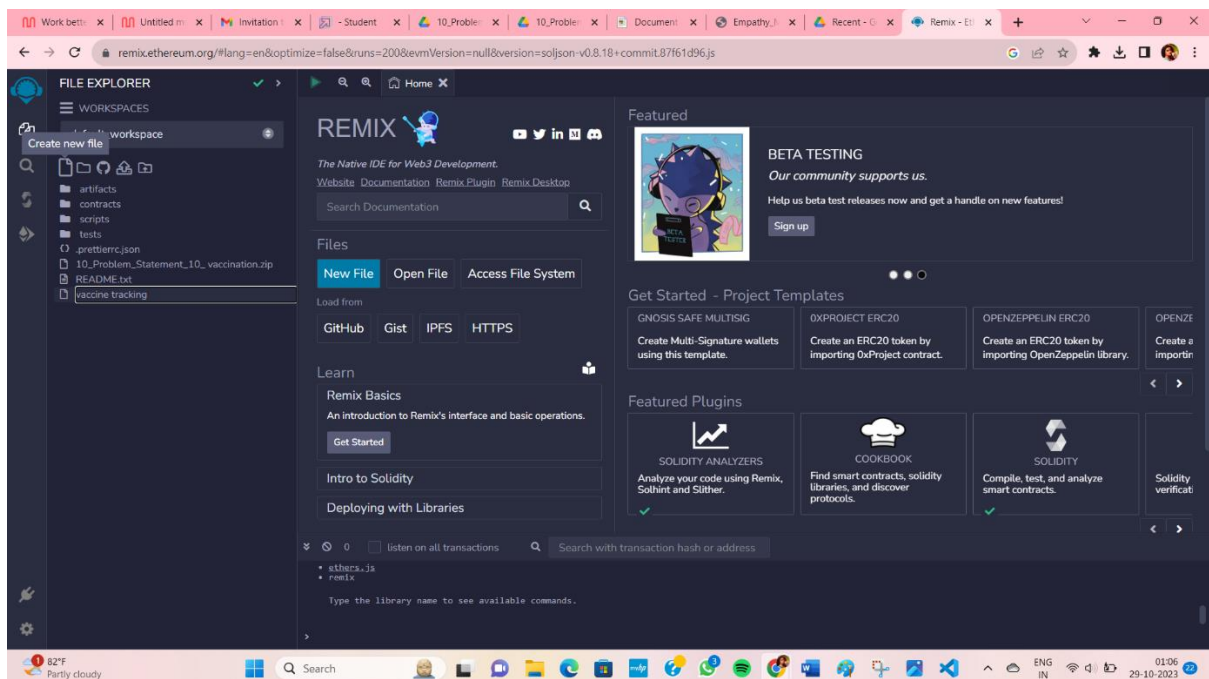
## STEP 1

- Open the REMIX IDE



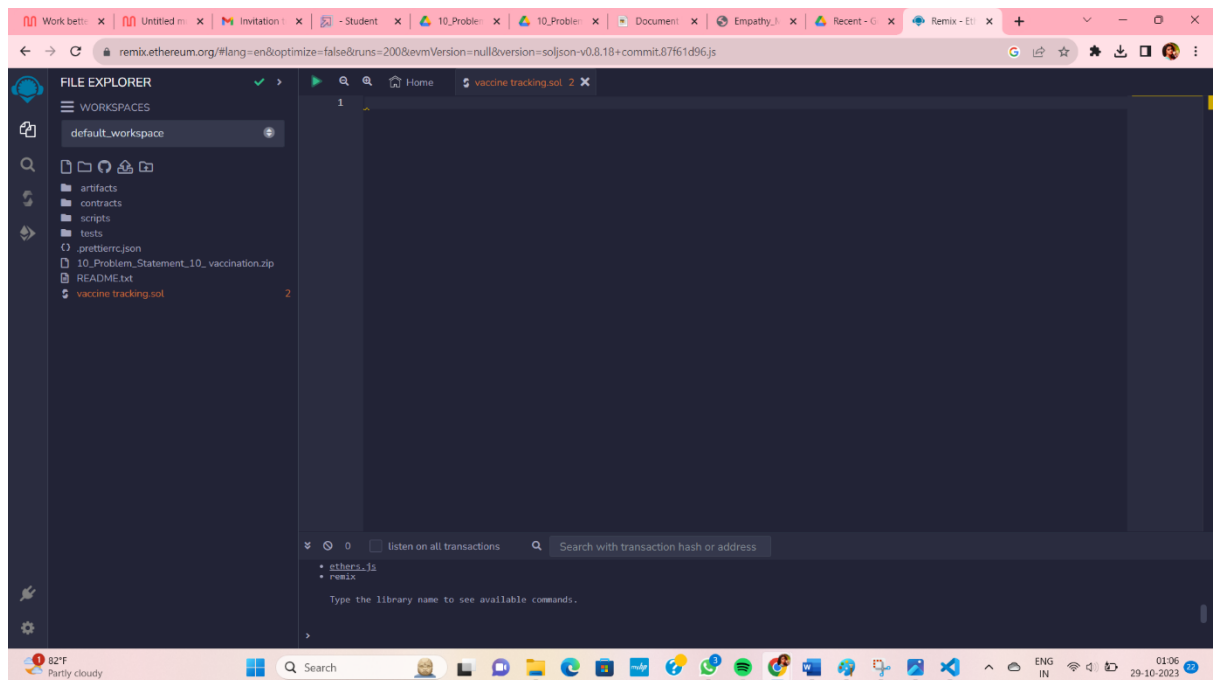
## STEP 2

- Create the new file



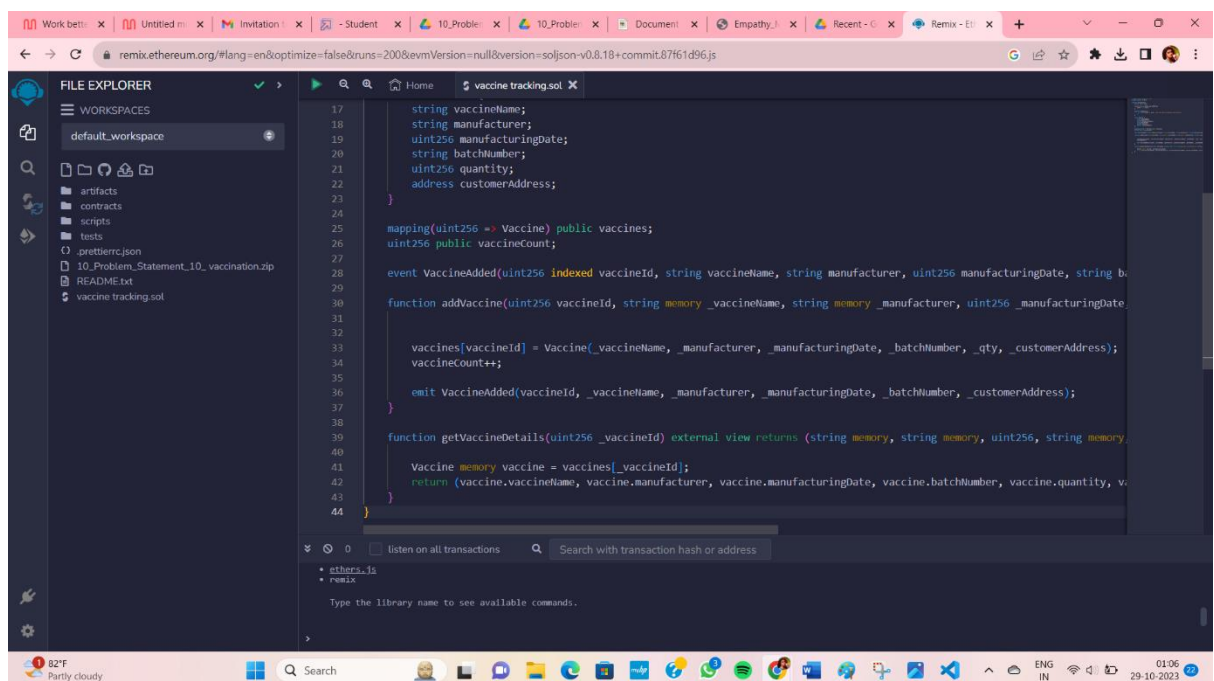
## STEP 3

- Open the created file



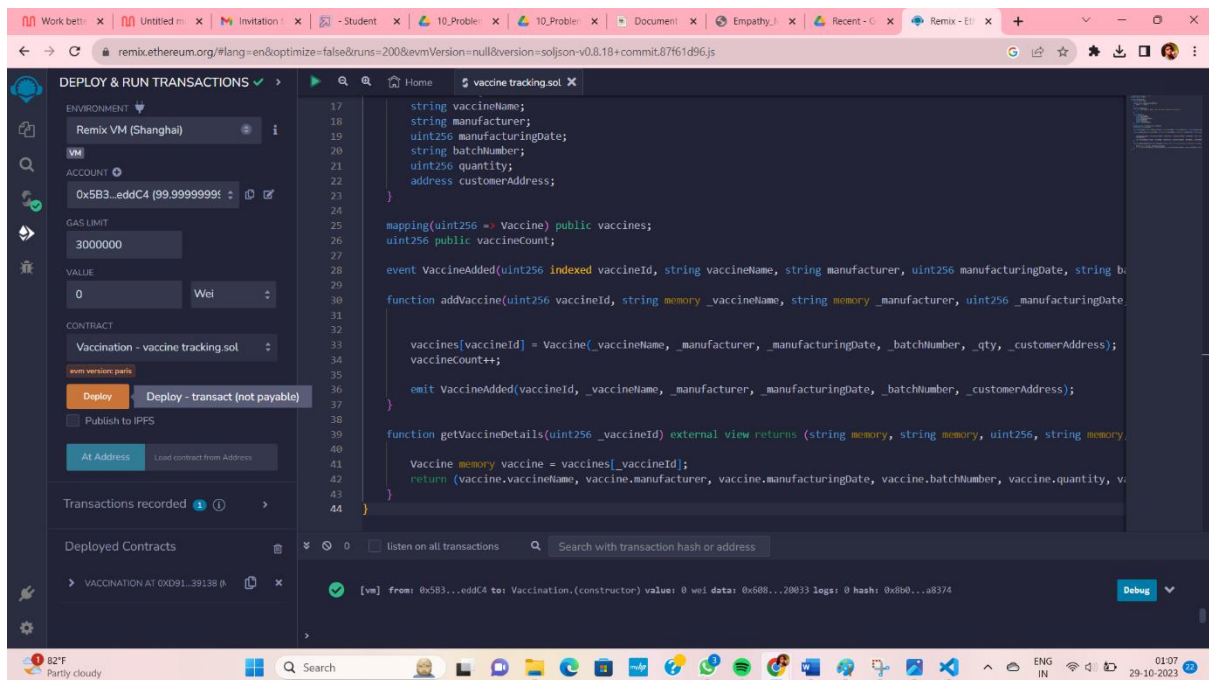
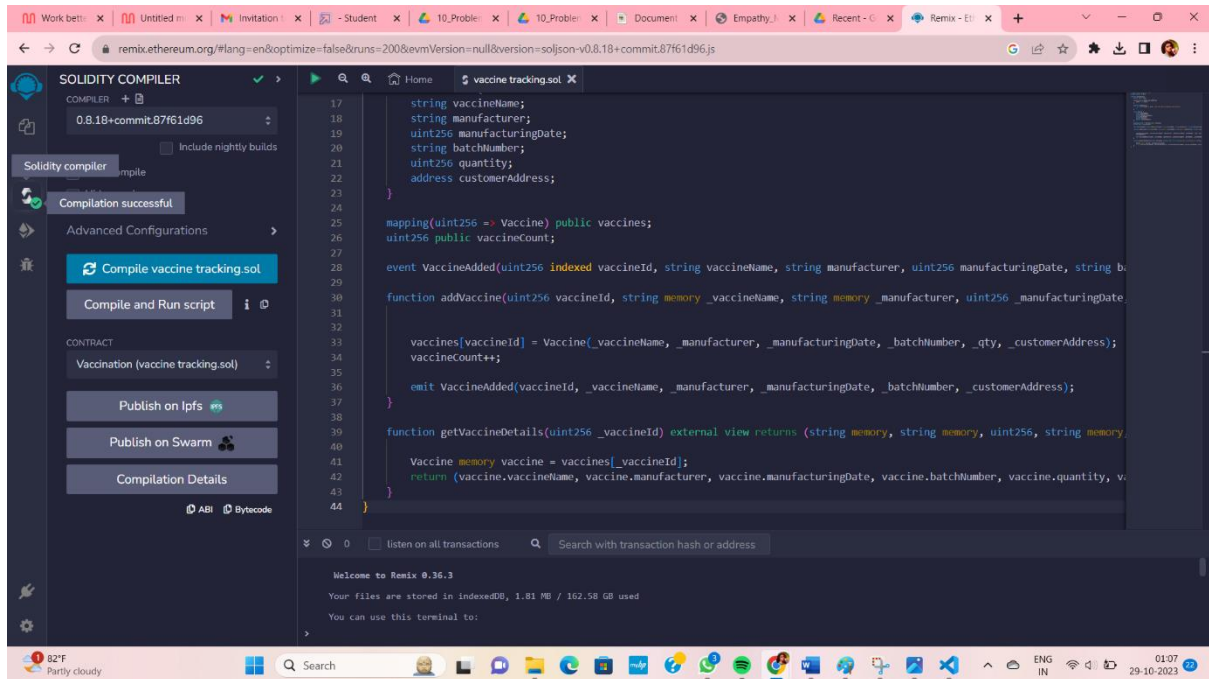
## STEP 4

- Implement the code



## STEP 5

- Compile the code



## STEP 6

- OUTPUT

The screenshot displays the Remix IDE interface for a Solidity smart contract named 'vaccine tracking.sol'. The left sidebar shows the 'DEPLOY & RUN TRANSACTIONS' panel with a deployed contract 'VACCINATION AT 0xD91...39138'. The main editor shows the following Solidity code:

```
17 string vaccineName;
18 string manufacturer;
19 uint256 manufacturingDate;
20 string batchNumber;
21 uint256 quantity;
22 address customerAddress;
23
24
25 mapping(uint256 => Vaccine) public vaccines;
26 uint256 public vaccineCount;
27
28 event VaccineAdded(uint256 indexed vaccineId, string vaccineName, string manufacturer, uint256 manufacturingDate, string batchNumber, uint256 quantity, address customerAddress);
29
30 function addVaccine(uint256 vaccineId, string memory _vaccineName, string memory _manufacturer, uint256 _manufacturingDate, string memory _batchNumber, uint256 _quantity, address _customerAddress) public {
31     vaccines[vaccineId] = Vaccine(_vaccineName, _manufacturer, _manufacturingDate, _batchNumber, _quantity, _customerAddress);
32     vaccineCount++;
33     emit VaccineAdded(vaccineId, _vaccineName, _manufacturer, _manufacturingDate, _batchNumber, _customerAddress);
34 }
35
36 function getVaccineDetails(uint256 _vaccineId) external view returns (string memory, string memory, uint256, string memory, string memory, uint256) {
37     Vaccine memory vaccine = vaccines[_vaccineId];
38     return (vaccine.vaccineName, vaccine.manufacturer, vaccine.manufacturingDate, vaccine.batchNumber, vaccine.quantity, vaccine.customerAddress);
39 }
40
41
42
43
44
```

The bottom console shows a successful transaction: `[va] from: 0x583...eddC4 to: Vaccination.(constructor) value: 0 wei data: 0x508...20033 logs: 0 hash: 0x80b...a8374`. The status bar at the bottom indicates the system temperature is 82°F and the date is 29-10-2023.