19BCE245

Aayush Shah 19BCE245 18 September 2022

# BlockChain Technology

## Practical 5

## **Implementing intrusion detection system**

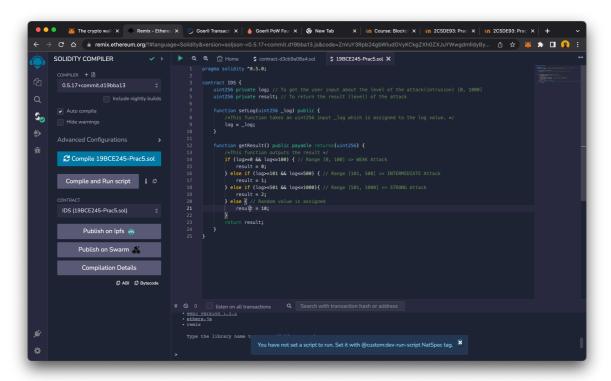
#### • Code:

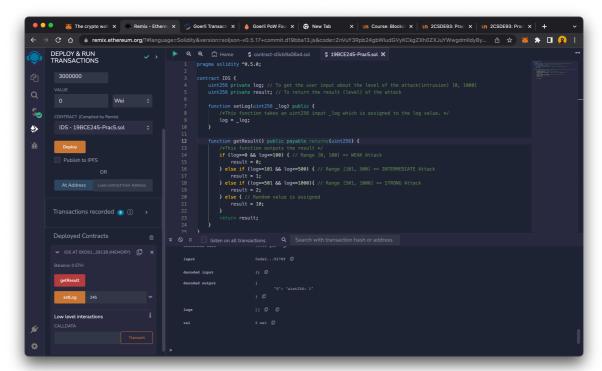
```
pragma solidity ^0.5.0;
contract IDS {
    uint256 private log; // To get the user input about the
level of the attack(intrusion) [0, 1000]
    uint256 private result; // To return the result (level) of
the attack
    function setLog(uint256 _log) public {
        /*This function takes an uint256 input log which is
assigned to the log value. */
       log = _log;
    function getResult() public payable returns(uint256) {
        /*This function outputs the result */
        if (log>=0 && log<=100) { // Range [0, 100] => WEAK
Attack
            result = 0;
        } else if (log>=101 && log<=500) { // Range [101, 500]
=> INTERMEDIATE Attack
            result = 1;
        else if (log>=501 \&\& log<=1000) { // Range [501,
1000] => STRONG Attack
            result = 2:
        } else { // Random value is assigned
            result = 10;
        return result:
```

PRACTICAL 5

19BCE245

### • Output Screenshots:





#### Conclusion

In this practical, I implemented Intrusion detection system, in which user input of log value is taken and checking class in which it falls and predicting the type of attack whether its intermediate, weak or strong.

PRACTICAL 5