

Blockchain Lab

Assignment-5

Name: Aditya Pathak

Subgroup: 3NC2

Roll Number: 102115044

```
1 //SPDX-License-Identifier: MIT
2
3 pragma solidity ^0.8.0;
4
5 contract Lottery{
6     address public manager;
7     address[] public players;
8
9     function lottery() public{ 24410 gas
10         manager = msg.sender;
11     }
12
13     function enter() public payable{ 48764 gas
14         require(msg.value > .01 ether);
15         players.push(msg.sender);
16     }
17
18     function random() private view returns(uint){ infinite gas
19         return uint(keccak256(abi.encode(block.timestamp, players)));
20     }
21
22     function winner() public restricted(){ infinite gas
23         uint index = random() % players.length;
24         payable(players[index]).transfer(address(this).balance);
25         players = new address[](0);
26     }
27
28     modifier restricted(){
29         require(msg.sender == manager);
30         _;
31     }
32 }
```

Code

Deployed/Unpinned Contracts

>

LOTTERY AT 0X990...6C5FC (BL

▼

LOTTERY AT 0X2D0...57743 (BL

Balance: 0 ETH

enter

lottery

winner

manager

players

uint256

▼

Low level interactions

i

CALLDATA

Transact

Deployment