

## Day 6

### Advance Blockchain

#### Lottery Smart Contract:

```
pragma solidity >=0.5.17 <0.7.3;

contract LotteryContract {

    address owner = 0xda822dfd0846F4F9C830C2fB3687e3C32D70d465;
    uint total_amount;
    uint winner_index = 999999;
    address winner_address;
    address[] participants;

    modifier onlyOwner()
    {
        require(msg.sender == owner, "Only owner can access this.");
        _;
    }

    function participate() payable public{
        require(msg.value > 1 ether, "Please use more than 1
ether");
        participants.push(msg.sender);
    }

    function potValue() public view returns(uint) {
        return address(this).balance;
    }

    function Participants_List() public view returns(address[]
memory) {
        return participants;
    }

    function luckyWinner() public payable onlyOwner () {
```

```

        winner_index =
uint(keccak256(abi.encodePacked(block.difficulty, now,
participants))) % participants.length;
        winner_address = participants[winner_index];
        address payable winner =
address(uint160(participants[winner_index]));
        winner.transfer(address(this).balance);
        participants = new address[](0);
        // return winner;
    }

    function show_winner() public view returns(address)
    {
        if(winner_index != 999999)
            return winner_address;
        else
            return 0x0000000000000000000000000000000000000000;
    }
}

```