

// program of lottery in solidity

pragma solidity >=0.7.0 <0.9.0;

contract Lottery{

address public manager;

address payable[] public participants;

constructor()

{

manager=msg.sender; // global variable

}

receive() external payable

{

require(msg.value==1 ether);

participants.push(payable(msg.sender));

}

function getBalance() public view returns(uint)

{

require(msg.sender== manager);

return address(this).balance;

}

function random() public view returns(uint)

{

return uint(keccak256(abi.encodePacked(block.difficulty,block.timestamp,participants.length)));

}

function announceWinner() public

```
{  
    require(msg.sender== manager);  
    require(participants.length>=3);  
    uint rdm = random();  
    uint index= rdm%participants.length;  
    address payable winner;  
    winner = participants[index];  
    winner.transfer(getBalance());  
    participants = new address payable[](0);  
}  
}
```