



```
1 // SPDX-License-Identifier: MIT
2 pragma solidity ^0.8.19;
3
4 contract LotteryFindTheNumber {
5     address public owner;
6     uint256 public maxPrize;
7     uint256 private hiddenNumber;
8
9     event Winner(address indexed player, uint256 amount);
10    event MaxPrizeUpdated(uint256 newMaxPrize);
11    event HiddenNumberUpdated();
12
13    modifier onlyOwner() {
14        require(msg.sender == owner, "Only owner can perform this action");
15        _;
16    }
17
18    constructor(uint256 _maxPrize, uint256 _hiddenNumber) payable {
19        require(msg.value >= _maxPrize, "Initial ETH must be >= maxPrize");
20        owner = msg.sender;
21        maxPrize = _maxPrize;
22        hiddenNumber = _hiddenNumber;
23    }
24
25    function updateMaxPrize(uint256 _newMaxPrize) external onlyOwner {
26        require(_newMaxPrize >= address(this).balance / 2, "New maxPrize must be at least balance / 2");
27        maxPrize = _newMaxPrize;
28    }
29}
```



