FOOD TRACKING SYSTEM:

INPUT:

```
// SPDX-License-Identifier: MIT
pragma solidity ^0.8.0;

contract FoodTracking {
    address public owner;

    enum FoodStatus {
        Unverified,
        Verified,
        Consumed
    }

    struct FoodItem {
```

```
        string itemId;
        string productName;
        string origin;
        uint256 sentTimestamp;
        FoodStatus status;
    }

    mapping(string => FoodItem) public foodItems;

    event FoodItemSent(
        string indexed itemId,
        string productName,
        string origin,
        uint256 sentTimestamp
    );
```

```
    event FoodItemVerified(string indexed itemId);
    event FoodItemConsumed(string indexed itemId);

    constructor() {
        owner = msg.sender;
    }

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

    modifier onlyUnconsumed(string memory itemId) {
```

```
        require(
            foodItems[itemId].status == FoodStatus.Verified,
            "Item is not verified or already consumed"
        );
        _;
    }

    function sendFoodItem(
        string memory itemId,
        string memory productName,
        string memory origin
    ) external onlyOwner {
        require(
```

```
bytes(foodItems[itemId].itemId).length == 0,
            "Item already exists"
        );

        foodItems[itemId] = FoodItem({
            itemId: itemId,
            productName: productName,
            origin: origin,
            sentTimestamp: block.timestamp,
            status: FoodStatus.Unverified
        });

        emit FoodItemSent(itemId, productName, origin, block.timestamp);
```

```
    }

    function verifyFoodItem(string
memory itemId) external onlyOwner {
        require(

bytes(foodItems[itemId].itemId).length
> 0,
            "Item does not exist"
        );
        require(
            foodItems[itemId].status ==
FoodStatus.Unverified,
            "Item is already verified or
consumed"
        );
```

```
        foodItems[itemId].status =
FoodStatus.Verified;

        emit FoodItemVerified(itemId);
    }

    function consumeFoodItem(
        string memory itemId
    ) external onlyUnconsumed(itemId) {
        foodItems[itemId].status =
FoodStatus.Consumed;

        emit FoodItemConsumed(itemId);
    }

    function getFoodItemDetails(
```

```
        string memory itemId
    )
        external
        view
        returns (string memory, string memory, uint256, FoodStatus)
    {
        FoodItem memory item = foodItems[itemId];
        return (item.productName, item.origin, item.sentTimestamp, item.status);
    }
}
```

ABI CODE:

```
[
    {
```

```
        "inputs": [],
        "stateMutability": "nonpayable",
        "type": "constructor"
    },
    {
        "anonymous": false,
        "inputs": [
            {
                "indexed": true,
                "internalType": "string",
                "name": "itemId",
                "type": "string"
            }
        ],
        "name": "FoodItemConsumed",
        "type": "event"
```

```
},
{
    "anonymous": false,
    "inputs": [
        {
            "indexed": true,
            "internalType": "string",
            "name": "itemId",
            "type": "string"
        },
        {
            "indexed": false,
            "internalType": "string",
            "name": "productName",
            "type": "string"
        },
```

```
            {
                "indexed": false,
                "internalType": "string",
                "name": "origin",
                "type": "string"
            },
            {
                "indexed": false,
                "internalType": "uint256",
                "name": "sentTimestamp",
                "type": "uint256"
            }
        ],
        "name": "FoodItemSent",
        "type": "event"
    },
```

```
{
    "anonymous": false,
    "inputs": [
        {
            "indexed": true,
            "internalType": "string",
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            "type": "string"
        }
    ],
    "name": "FoodItemVerified",
    "type": "event"
},
{
    "inputs": [
        {
```

```
                "internalType": "string",
                "name": "itemId",
                "type": "string"
            }
        ],
        "name": "consumeFoodItem",
        "outputs": [],
        "stateMutability": "nonpayable",
        "type": "function"
    },
    {
        "inputs": [
            {
                "internalType": "string",
                "name": "",
                "type": "string"
```

```
        }
    ],
    "name": "foodItems",
    "outputs": [
        {
            "internalType": "string",
            "name": "itemId",
            "type": "string"
        },
        {
            "internalType": "string",
            "name": "productName",
            "type": "string"
        },
        {
            "internalType": "string",
```

```
                "name": "origin",
                "type": "string"
            },
            {
                "internalType": "uint256",
                "name": "sentTimestamp",
                "type": "uint256"
            },
            {
                "internalType": "enum
FoodTracking.FoodStatus",
                "name": "status",
                "type": "uint8"
            }
        ],
        "stateMutability": "view",
```

```
        "type": "function"
    },
    {
        "inputs": [
            {
                "internalType": "string",
                "name": "itemId",
                "type": "string"
            }
        ],
        "name": "getFoodItemDetails",
        "outputs": [
            {
                "internalType": "string",
                "name": "",
                "type": "string"
```

```
            },
            {
                "internalType": "string",
                "name": "",
                "type": "string"
            },
            {
                "internalType": "uint256",
                "name": "",
                "type": "uint256"
            },
            {
                "internalType": "enum
FoodTracking.FoodStatus",
                "name": "",
                "type": "uint8"
```

```
            }
        ],
        "stateMutability": "view",
        "type": "function"
    },
    {
        "inputs": [],
        "name": "owner",
        "outputs": [
            {
                "internalType": "address",
                "name": "",
                "type": "address"
            }
        ],
        "stateMutability": "view",
```

```
    "type": "function"
},
{
    "inputs": [
        {
            "internalType": "string",
            "name": "itemId",
            "type": "string"
        },
        {
            "internalType": "string",
            "name": "productName",
            "type": "string"
        },
        {
            "internalType": "string",
```

```
                "name": "origin",
                "type": "string"
            }
        ],
        "name": "sendFoodItem",
        "outputs": [],
        "stateMutability": "nonpayable",
        "type": "function"
    },
    {
        "inputs": [
            {
                "internalType": "string",
                "name": "itemId",
                "type": "string"
            }
```

```
        ],
        "name": "verifyFoodItem",
        "outputs": [],
        "stateMutability": "nonpayable",
        "type": "function"
    }
]
```


BYTE CODE:


```
608060405234801561001057600080fd
5b50336000806101000a81548173ffffff
ffffffffffffffffffffffffffffffff021916908
373ffffffffffffffffffffffffffffffffffffff16
0217905550611c3806100606000396000
f3fe608060405234801561001057600080
fd5b506004361061006257600035600e
01c806308f52751146100675780632b4426c91461009a578063cfd26146100b65780638da5cb5b146100ea57806
```

391acc17214610108578063ca2f564714
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0dcb565b6040518091039f35b6100b4
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565b610392565b005b6100d060048036
038101906100cb9190610c73565b6104
b8565b6040516100e195949392919061
0e1e565b6040518091039f35b6100f26
106a9565b6040516100ff9190610ec756
5b6040518091039f35b610122600480
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610158919061fc5565b908152602001
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50505050815260200160038201548152
6020016004820160009054906101000a
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1805184825260208301602085012081
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60010190602001808311610 54d578290
03601f168201915b505050505090806 0
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0160208091040260200160405190810 1
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601f106105cd576101008083540402 83
529160200191610 5f8565b8201919060
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1f168201915b505050505090806002 01
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ffffff16146109865760405 17f08c379a0
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611315578190505b611329611321856 1
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2565b601f1984166113f0866111cc565b
60005b828110156114185784890151 82
556001820191506020850194506020 81
019050611 3f3565b868310156114355 7
848901516114316 01f89168261133e56
5b8355505b6001600288020188555050
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788185610d02565b9050611487604083
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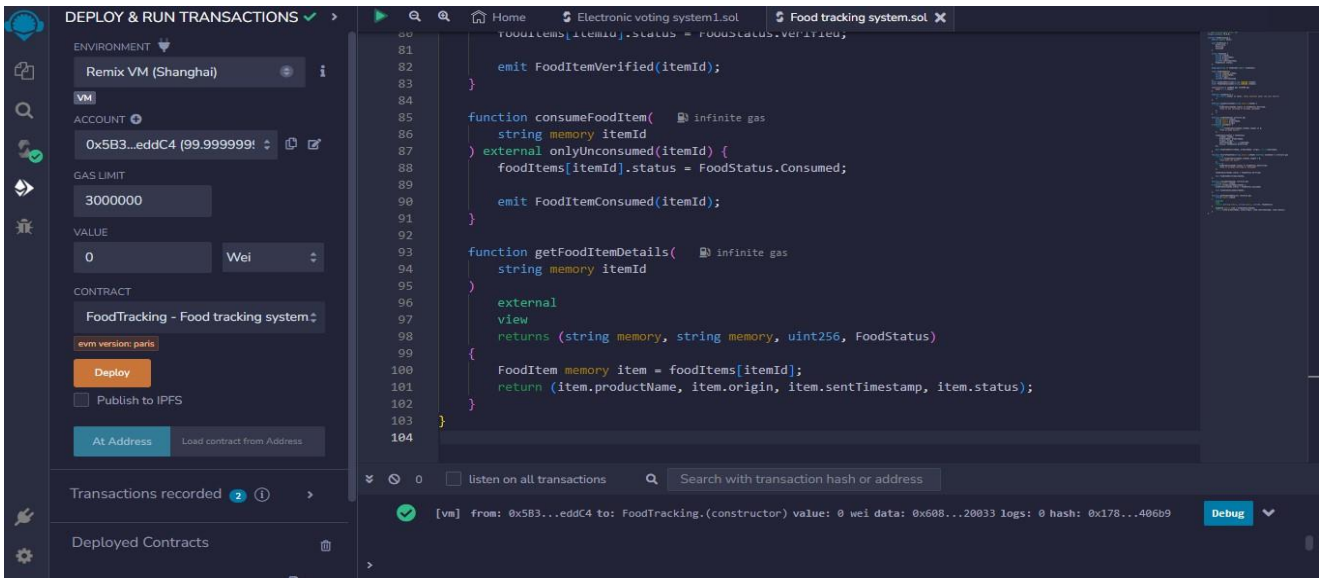
0208201905091905056 5b60006020820
1905081810360008301526114f481611
4b8565b905091905056 5b7f4974656d2
0697320616c726561647920766572696
6696564206f7220636f6e736000820152
7f756d656400000000000000000000000
0000000000000000000000000000000000
006020820152505 65b600061155760248
3610cc7565b9150611562826114fb56
5b6040820190509190505 65b60006020
8201905081810360008301526115868161
61154a565b905091905056fea2646970
6673582212207293306a7cb31a50468fc
c254553e1fa266d31971102f817aa2c15
a2ea91ffb864736f6c63430008120033

OUTPUT:


DEPLOY & RUN TRANSACTIONS
ENVIRONMENT
Remix VM (Shanghai)
VM
ACCOUNT
0x5B3...eddC4 (99.999999
GAS LIMIT
3000000
VALUE
0
Wei
CONTRACT
FoodTracking - Food tracking system
evm version: paris
Deploy
Publish to IPFS
At Address
Load contract from Address
Transactions recorded 2
Deployed Contracts
Home
Electronic voting system1.sol
Food tracking system.sol
emit FoodItemVerified(itemId);
function consumeFoodItem(infinite gas
string memory itemId
) external onlyUnconsumed(itemId) {
foodItems[itemId].status = FoodStatus.Consumed;
emit FoodItemConsumed(itemId);
function getFoodItemDetails(infinite gas
string memory itemId
external
view
returns (string memory, string memory, uint256, FoodStatus)
FoodItem memory item = foodItems[itemId];
return (item.productName, item.origin, item.sentTimestamp, item.status);
listen on all transactions
Search with transaction hash or address
[vm] from: 0x5B3...eddC4 to: FoodTracking.(constructor) value: 0 wei data: 0x608...20033 logs: 0 hash: 0x178...406b9
Debug