

```
const { ethers } = require("ethers");
```

```
const abi = [  
  {  
    "anonymous": false,  
    "inputs": [  
      {  
        "indexed": false,  
        "internalType": "uint256",  
        "name": "productId",  
        "type": "uint256"  
      },  
      {  
        "indexed": false,  
        "internalType": "string",  
        "name": "name",  
        "type": "string"  
      },  
      {  
        "indexed": false,  
        "internalType": "string",  
        "name": "description",  
        "type": "string"  
      },  
      {  
        "indexed": false,  
        "internalType": "uint256",  
        "name": "quantity",  
        "type": "uint256"  
      },  
      {  
        "indexed": false,  
        "internalType": "address",  
        "name": "owner",  
        "type": "address"  
      }  
    ],  
    "name": "ProductAdded",  
    "type": "event"  
  },  
  {  
    "anonymous": false,
```

```
"inputs": [  
  {  
    "indexed": false,  
    "internalType": "uint256",  
    "name": "productId",  
    "type": "uint256"  
  },  
  {  
    "indexed": false,  
    "internalType": "string",  
    "name": "name",  
    "type": "string"  
  },  
  {  
    "indexed": false,  
    "internalType": "string",  
    "name": "description",  
    "type": "string"  
  },  
  {  
    "indexed": false,  
    "internalType": "uint256",  
    "name": "quantity",  
    "type": "uint256"  
  }  
],  
"name": "ProductUpdated",  
"type": "event"  
},  
{  
  "inputs": [  
    {  
      "internalType": "uint256",  
      "name": "ProductId",  
      "type": "uint256"  
    },  
    {  
      "internalType": "string",  
      "name": "_name",  
      "type": "string"  
    }  
  ],  
  {  

```

```
    "internalType": "string",
    "name": "_description",
    "type": "string"
  },
  {
    "internalType": "uint256",
    "name": "_quantity",
    "type": "uint256"
  }
],
"name": "addProduct",
"outputs": [],
"stateMutability": "nonpayable",
"type": "function"
},
{
  "inputs": [
    {
      "internalType": "uint256",
      "name": "_productId",
      "type": "uint256"
    }
  ],
  "name": "getProductDetails",
  "outputs": [
    {
      "internalType": "string",
      "name": "name",
      "type": "string"
    },
    {
      "internalType": "string",
      "name": "description",
      "type": "string"
    },
    {
      "internalType": "uint256",
      "name": "quantity",
      "type": "uint256"
    }
  ],
  {
    "internalType": "address",
```

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        "name": "owner",
        "type": "address"
    }
],
"stateMutability": "view",
"type": "function"
},
{
    "inputs": [],
    "name": "productCount",
    "outputs": [
        {
            "internalType": "uint256",
            "name": "",
            "type": "uint256"
        }
    ],
    "stateMutability": "view",
    "type": "function"
},
{
    "inputs": [
        {
            "internalType": "uint256",
            "name": "",
            "type": "uint256"
        }
    ],
    "name": "products",
    "outputs": [
        {
            "internalType": "string",
            "name": "name",
            "type": "string"
        },
        {
            "internalType": "string",
            "name": "description",
            "type": "string"
        }
    ],
    {
        "internalType": "uint256",

```

```

        "name": "quantity",
        "type": "uint256"
    },
    {
        "internalType": "address",
        "name": "owner",
        "type": "address"
    }
],
"stateMutability": "view",
"type": "function"
},
{
    "inputs": [
        {
            "internalType": "uint256",
            "name": "_productId",
            "type": "uint256"
        },
        {
            "internalType": "string",
            "name": "_name",
            "type": "string"
        },
        {
            "internalType": "string",
            "name": "_description",
            "type": "string"
        },
        {
            "internalType": "uint256",
            "name": "_quantity",
            "type": "uint256"
        }
    ],
    "name": "updateProduct",
    "outputs": [],
    "stateMutability": "nonpayable",
    "type": "function"
}
]

```

```
if (!window.ethereum) {  
  alert('Meta Mask Not Found')  
  window.open("https://metamask.io/download/")  
}  
  
export const provider = new ethers.providers.Web3Provider(window.ethereum);  
export const signer = provider.getSigner();  
export const address = "0xF8e8C778C2C1B8D54BE75b01Dfd53aCDa43533B0"  
  
export const contract = new ethers.Contract(address, abi, signer)
```