

### **Bct practical 3**

```
// SPDX-License-Identifier: MIT
```

```
pragma solidity ^0.8.18;
```

```
contract Bank {
```

```
// Mapping to store balances of each customer (address)
```

```
mapping(address => uint256) private balances;
```

```
// Event logs
```

```
event Deposit(address indexed account, uint256 amount);
```

```
event Withdraw(address indexed account, uint256 amount);
```

```
// Deposit money into your account
```

```
function deposit() public payable {
```

```
require(msg.value > 0, "Deposit amount must be greater than zero");
```

```
balances[msg.sender] += msg.value;
```

```
emit Deposit(msg.sender, msg.value);
```

```
}
```

```
// Withdraw money from your account
```

```
function withdraw(uint256 amount) public {
```

```
require(amount > 0, "Withdraw amount must be greater than zero");
```

```
require(balances[msg.sender] >= amount, "Insufficient balance");
```

```
balances[msg.sender] -= amount;
```

```
payable(msg.sender).transfer(amount);
```

```
emit Withdraw(msg.sender, amount);
```

```
}
```

```
// Show your account balance
```

```
function getBalance() public view returns (uint256) {
```

```
return balances[msg.sender];
```

```
}}
```