

```
import java.util.concurrent.locks.Lock;
import java.util.concurrent.locks.ReentrantLock;

public class BankAccount {

    private double balance;

    private Lock lock;

    public BankAccount(){

        balance = 0.0;

        lock = new ReentrantLock();

    }

    public void deposit(double amount){

        lock.lock();

        try {

            balance += amount;

            System.out.println("Deposito: " + amount);

            System.out.println("Saldo despues del deposito: " + balance);

        } finally {

            lock.unlock();

        }

    }

    public void withdraw(double amount){

        lock.lock();

        try {

            if(balance >= amount){

                balance -= amount;

                System.out.println("Retiro: " + amount);

                System.out.println("Saldo despues del retiro:" + balance);

            } else {
```

```

        System.out.println("Intento de retiro:" + amount);

        System.out.println("Saldo insuficiente, retiro cancelado.");

    }
} finally {
    lock.unlock();
}
}

public static void main(String[] args){
    BankAccount account = new BankAccount();

    Thread depositThread1 = new Thread(() -> account
    .deposit(1000));

    Thread depositThread2 = new Thread(() -> account
    .deposit(300));

    Thread withdrawalThread1 = new Thread(() ->
    account.withdraw(150));

    Thread withdrawalThread2 = new Thread(() ->
    account.withdraw(1200));

    depositThread1.start();
    depositThread2.start();
    withdrawalThread1.start();
    withdrawalThread2.start();
}
}

```

## Output

```
Deposito: 1000.0  
Saldo despues del deposito; 1000.0  
Deposito: 300.0  
Saldo despues del deposito; 1300.0  
Retiro: 150.0  
Saldo despues del retiro:1150.0  
Intento de retiro:1200.0  
Saldo insuficiente, retiro cancelado.
```

```
=== Code Execution Successful ===
```