

1. write a java program to create a class as bank account with methods called deposit () and withdraw () create a subclass called savings account that override the withdraw () method to parent withdraw if the account balance falls below one hundred

PROGRAM:

```
class BankAccount {  
    protected double balance;  
  
    public BankAccount(double initialBalance) {  
        this.balance = initialBalance;  
    }  
  
    public void deposit(double amount) {  
        if (amount > 0) {  
            balance += amount;  
            System.out.println("Deposited: " + amount);  
            System.out.println("New balance: " + balance);  
        } else {  
            System.out.println("Deposit amount must be positive");  
        }  
    }  
  
    public void withdraw(double amount) {  
        if (amount > 0 && amount <= balance) {  
            balance -= amount;  
            System.out.println("Withdrew: " + amount);  
            System.out.println("New balance: " + balance);  
        } else {  
            System.out.println("Withdrawal amount must be positive and less than or equal to the  
current balance");  
        }  
    }  
}
```

```
    public double getBalance() {  
        return balance;  
    }  
}
```

```
class SavingsAccount extends BankAccount {  
    public SavingsAccount(double initialBalance) {  
        super(initialBalance);  
    }  
}
```

```
@Override  
public void withdraw(double amount) {  
    if (balance - amount >= 100) {  
        super.withdraw(amount);  
    } else {  
        System.out.println("Cannot withdraw. Balance would fall below $100");  
    }  
}  
}
```

```
public class Main {  
    public static void main(String[] args) {  
        SavingsAccount savings = new SavingsAccount(500);  
  
        savings.deposit(200); // Deposits 200, new balance should be 700  
        savings.withdraw(150); // Withdraws 150, new balance should be 550  
        savings.withdraw(460); // Tries to withdraw 460, but should be blocked since it would bring  
the balance below 100  
        savings.withdraw(50); // Withdraws 50, new balance should be 500  
    }  
}
```

OUTPUT:

```
Deposited: 200.0  
New balance: 700.0  
Withdrew: 150.0  
New balance: 550.0  
Cannot withdraw. Balance would fall below $100  
Withdrew: 50.0  
New balance: 500.0
```