

Lab 5:

Harshil Doshi  
IBMIACSO57

```
import java.util.Scanner;
import java.lang.Math;
class Account
{
    private String name;
    private double account-no;
    private char account-type;
    private double balance;

    void getData(char ch)
    {
        Scanner xx = new Scanner(System.in);
        System.out.print("Enter the name of the customer: ");
        name = xx.next();
        xx.nextLine();
        System.out.print("Enter the account no. of customer: ");
        account-no = xx.nextDouble();
        System.out.print("Enter the balance of customer: ");
        balance = xx.nextDouble();
        account-type = ch;
    }

    void updateBalance(double x)
    {
        balance = balance + x;
    }
}
```

```
void updateBalance1 (double x)
```

```
{  
    balance = balance - x;
```

```
}
```

```
void updateBalance2 (double x)
```

```
{  
    balance = x;
```

```
}
```

```
double getBalance()
```

```
{  
    return balance;
```

```
}
```

```
void displayBalance()
```

```
{  
    System.out.println ("The balance is : " + balance);  
}
```

```
}
```

```
class SavingAccount extends Account {
```

```
    private double interestRate;
```

```
    savingAccount ()
```

```
{  
    Scanner xx = new Scanner (System.in);  
    getData ('S');
```

```
    System.out.print ("Enter the next interest rate");
```

```
    interestRate = xx.nextDouble ();
```

```
}
```

```
void getDeposit ()
```

```
{  
    Scanner xx = new Scanner (System.in);
```

```
    System.out.print ("Enter the amount to be deposited");
```

```
    double x = xx.nextDouble ();
```

```
    updateBalance (x);
```

```
}
```

```
void computeInterest ()
```

```
{ Scanner xx = new Scanner (system.in);  
  system.out.println ("Enter the no. of yrs : ");
```

```
double time = xx.nextDouble();
```

```
double x = (getbalance() * Math.pow ((1 + ((interest_rate)  
                                           / 100)), time));
```

```
updatebalance2(x);
```

```
system.out.println ("The computed interest is : " + x);  
display balance();
```

```
}
```

```
void withdraw ()
```

```
{ system.out.print ("Enter the amount to be  
  withdrawn : ");
```

```
Scanner xx = new Scanner (system.in);
```

```
double x = xx.nextDouble();  
while (x > getbalance())
```

```
{ system.out.println ("The amount withdrawn is more  
  than the balance at the moment : ");
```

```
xx = nextDouble();
```

```
}  
updatebalance(x);  
display balance();
```

```
{
```

```
}
```

```
class Current_Account extends Account {
```

```
private double min_balance;
```

```
private int cheque_book;
```

```
Current_Account ()
```

```
{ Scanner xx = new Scanner (system.in);
```

```
getdata('C');
```



```

System.out.print("Enter the min. balance:");
min_balance = xx.nextDouble();
}
void getdeposit()
{
    Scanner xx = new Scanner(System.in);
    System.out.print("Enter the amount to be deposited:");
    double x = xx.nextDouble();
    updatebalance(x);
}
void issuecheck()
{
    Scanner xx = new Scanner(System.in);
    System.out.print("Enter the amount of check:");
    double n = xx.nextDouble();
    if (n > (getbalance() - min_balance))
    {
        System.out.println("You have issued a cheque of  
more than mini. bal & have been charged the penalty  
of 100 rupees:");
        updatebalance(100);
    }
    else
    {
        updatebalance(n);
    }
    displaybalance();
}
void withdraw()
{
    System.out.print("Enter the amt. to be with-  
drawn:");
    Scanner xx = new Scanner(System.in);
    double x = xx.nextDouble();
    while (x > (getbalance() - min_balance))
    {
        System.out.println("Amt. withdraw'n more th  
balance enter again:");
        x = xx.nextDouble();
    }
}

```

```
update Balance 1 (x);  
display balance();  
}
```