```
--------Welcome----------
Savings account or current account? 1- Savings; 2- Current
1
Enter your name
Anisha
Enter the account number
999
Enter the current available balance in your savings account
900
1. Deposit money
2. Calculate compound interest
3. Withdraw money
4. Display balance
5. Cheque book facility
6. Exit
Enter your choice
1
Enter the amount to be deposited
100
Amount has been deposited and balance has been updated
1. Deposit money
2. Calculate compound interest
3. Withdraw money
4. Display balance
5. Cheque book facility
6. Exit
Enter your choice
4
Balance amount is 1000.0
1. Deposit money
2. Calculate compound interest
3. Withdraw money
4. Display balance
5. Cheque book facility
6. Exit
Enter your choice
2
Enter principal deposit amount
100
Enter the rate of interest
4
Enter the term(years)
2
Enter the number of times interest in compounded annually
2
Interest is compounded and deposited; balance is updated
1. Deposit money
2. Calculate compound interest
3. Withdraw money
4. Display balance
5. Cheque book facility
6. Exit
Enter your choice
4
Balance amount is 1116.985856
1. Deposit money
2. Calculate compound interest
3. Withdraw money
4. Display balance
5. Cheque book facility
6. Exit
```

```
Enter your choice
3
Enter the amount of money to be withdrawn
450
Money has been withdrawn and balance has been updated
1. Deposit money
2. Calculate compound interest
3. Withdraw money
4. Display balance
5. Cheque book facility
6. Exit
Enter your choice
3
Enter the amount of money to be withdrawn
900
Insufficient balance
1. Deposit money
2. Calculate compound interest
3. Withdraw money
4. Display balance
5. Cheque book facility
6. Exit
Enter your choice
4
Balance amount is 666.985856
1. Deposit money
2. Calculate compound interest
3. Withdraw money
4. Display balance
5. Cheque book facility
6. Exit
Enter your choice
5
Cheque book facility is not available
1. Deposit money
2. Calculate compound interest
3. Withdraw money
4. Display balance
5. Cheque book facility
6. Exit
Enter your choice
6


------------------
(program exited with code: 0)
```

```
--------Welcome----------
Savings account or current account? 1- Savings; 2- Current
2
Enter your name
Anisha
Enter the account number
989
Enter the current available balance in your account
1000
1. Deposit money
2. Chequebook facility
3. Withdraw money
4. Display balance
5. Exit
1
Enter the amount to be deposited
100
Amount has been deposited and balance has been updated
1. Deposit money
2. Chequebook facility
3. Withdraw money
4. Display balance
5. Exit
2
Cheque book facility is available
1. Deposit money
2. Chequebook facility
3. Withdraw money
4. Display balance
5. Exit
3
Enter the amount to be withdrawn
500
Amount has been withdrawn and balance has been updated
1. Deposit money
2. Chequebook facility
3. Withdraw money
4. Display balance
5. Exit
4
Balance amount is 600.0
1. Deposit money
2. Chequebook facility
3. Withdraw money
4. Display balance
5. Exit
2
Cheque book facility is available
1. Deposit money
2. Chequebook facility
3. Withdraw money
4. Display balance
5. Exit
3
Enter the amount to be withdrawn
300
Amount has been withdrawn and balance has been updated
Balance is below the minimum threshold. Service penalty charge = 100/- .
Penalty charge has been deducted from account balance. Current balance is 200.0
```

```
Penalty charge has been deducted from account balance. Current balance is 0.0
1. Deposit money
2. Chequebook facility
3. Withdraw money
4. Display balance
5. Exit
3
Enter the amount to be withdrawn
200
Amount has been withdrawn and balance has been updated
Balance is below the minimum threshold. Service penalty charge = 100/- .
Due to insufficient funds, penalty charge will be deducted from account after replenishing. Current balance is 0.0
1. Deposit money
2. Chequebook facility
3. Withdraw money
4. Display balance
5. Exit
3
Enter the amount to be withdrawn
780
Insufficient funds!
1. Deposit money
2. Chequebook facility
3. Withdraw money
4. Display balance
5. Exit
4
Balance amount is 0.0
1. Deposit money
2. Chequebook facility
3. Withdraw money
4. Display balance
5. Exit
5


------------------
(program exited with code: 0)
Press return to continue
```

```java
import java.util.*;
import java.lang.Math;
class Account
{
    String name;
    int acctno;
    char type;
    double balance;
    double dep;
    boolean cheq;

    void get(char c)
    {
        type = c;
        if(c=='s' || c == 'S')
        cheq=false;
        else cheq=true;
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter your name");
        name = sc.nextLine();
        System.out.println("Enter the account number");
        acctno = sc.nextInt();
        System.out.println("Enter the current available balance in your account");
        balance= sc.nextDouble();
    }

    void putd()
    {
        System.out.println("Account details");
        System.out.println("Name: "+name);
        System.out.println("Account number: "+acctno);
        System.out.println("Account type :"+type);
        System.out.println("balance: "+balance);
    }
    void dep()
    {
                Scanner ss = new Scanner(System.in);
                System.out.println("Enter the amount to be deposited");
                dep= ss.nextDouble();
                balance=balance +dep;
                System.out.println("Amount has been deposited and balance has been updated");
    }
    void display()
    {

                System.out.println("Balance amount is "+balance);
    }

    void check()
    {
                if(cheq==false)
                System.out.println("Cheque book facility is not available");
                else
                System.out.println("Cheque book facility is available");

    }


}
```

```
class Saving extends Account
{

    double rate;

    double s_with;
    int n;

    int ch;
    double amt;
    double term;
    double pr;



    void ci()
    {
                    Scanner ss = new Scanner(System.in);
                    System.out.println("Enter principal deposit amount");
                    pr = ss.nextDouble();
                    System.out.println("Enter the rate of interest");
                    rate = ss.nextDouble();
                    System.out.println("Enter the term(years)");
                    term = ss.nextDouble();
                    System.out.println("Enter the number of times interest in compounded annually");
                    n = ss.nextInt();
                    amt = pr* Math.pow((1+(rate/100)),(n*term));
                    balance+= amt;
                    System.out.println("Interest is compounded and deposited; balance is updated");

    }

    void with_s()
    {

                Scanner ss = new Scanner(System.in);
                System.out.println("Enter the amount of money to be withdrawn");
                s_with = ss.nextDouble();
                if(s_with>balance)
                System.out.println("Insufficient balance");
                else
                {balance= balance - s_with;
                System.out.println("Money has been withdrawn and balance has been updated");}
    }




}
```

```
class Current extends Account
{

    double c_with;
    double pen;
    double min;
    Current()
    {
        pen=100;
        min=500;
    }

    void with_c()
    {
                Scanner xx = new Scanner(System.in);
                System.out.println("Enter the amount to be withdrawn");
                c_with= xx.nextDouble();
                if(c_with>balance)
                {System.out.println("Insufficient funds!");
                return;}
                else
                {balance= balance- c_with;
                System.out.println("Amount has been withdrawn and balance has been updated");}
                if(balance<min)
                {
                    System.out.println("Balance is below the minimum threshold. Service penalty charge = 100/- .");
                    if(balance<pen)
                    System.out.println("Due to insufficient funds, penalty charge will be deducted from account after replenishing. Current balance is "+balance);
                    else
                    {
                        balance= balance-pen;
                        System.out.println("Penalty charge has been deducted from account balance. Current balance is "+balance);
                    }
                }
    }


}
```

```java
class lab6
{
    public static void main(String sss[])
    {
        int cch, chh;
        Scanner sx = new Scanner(System.in);
        System.out.println("--------Welcome----------");
        System.out.println("Savings account or current account? 1- Savings; 2- Current");
        int ch= sx.nextInt();
        if(ch==1)
        {
            Saving s = new Saving();
            s.get('S');
            do{
            System.out.println("1. Deposit money\n2. Calculate compound interest\n3. Withdraw money\n4. Display balance\n5. Cheque book facility\n6. Exit");
            System.out.println("Enter your choice");
            chh= sx.nextInt();
            switch(chh)
            {
                case 1:
                s.dep();
                break;

                case 2:
                s.ci();
                break;

                case 3:
                s.with_s();
                break;

                case 4:
                s.display();
                break;

                case 5:
                s.check();
                break;

                case 6:
                break;

                default:
                System.out.println("Wrong option.");
                break;
            }
            }while(chh!=6);

        }
```

```
        else if(ch==2)
        {
            Current cr = new Current();
            cr.get('C');
            do{
            System.out.println("1. Deposit money\n2. Chequebook facility\n3. Withdraw money\n4. Display balance\n5. Exit");
            cch= sx.nextInt();
            switch(cch)
            {
                case 1:
                cr.dep();
                break;

                case 2:
                cr.check();
                break;

                case 3:
                cr.with_c();
                break;

                case 4:
                cr.display();
                break;

                case 5:
                break;

                default:
                System.out.println("Wrong option.");
                break;
            }
        }while(cch!=5);



        }
        else System.out.println("Wrong!");
    }
}
```

```java
import java.util.*;
abstract class Shape
{
    int a;
    int b;

    abstract void printArea();
}
class Rectangle extends Shape
{
    Rectangle(int x, int y)
    {
        a=x;
        b=y;
    }

    void printArea()
    {
        System.out.println("Area is "+(a*b));
    }
}

class Triangle extends Shape
{
    Triangle(int x, int y)
    {
        a=x;
        b=y;
    }
    void printArea()
    {
        System.out.println("Area is "+(a*b*0.5));
    }
}
class Circle extends Shape
{
    Circle(int x)
    {
        a=x;
    }
    void printArea()
    {
        System.out.println("Area is "+(a*a*3.14));
    }
}

class lab5
{
    public static void main(String ss[])
    {
        int l,b,ba,h,ra;
        Scanner sc = new Scanner(System.in);

        System.out.println("enter the length and breadth of rectangle");
        l= sc.nextInt();
        b= sc.nextInt();
        Rectangle r= new Rectangle(l,b);
        r.printArea();

        System.out.println("enter the base and height of triangle");
        ba= sc.nextInt();
```

```java
class lab5
{
    public static void main(String ss[])
    {
        int l,b,ba,h,ra;
        Scanner sc = new Scanner(System.in);

        System.out.println("enter the length and breadth of rectangle");
        l= sc.nextInt();
        b= sc.nextInt();
        Rectangle r= new Rectangle(l,b);
        r.printArea();

        System.out.println("enter the base and height of triangle");
        ba= sc.nextInt();
        h= sc.nextInt();
        Triangle t = new Triangle(ba,h);
        t.printArea();

        System.out.println("enter the radius of circle");
        ra= sc.nextInt();
        Circle c = new Circle(ra);
        c.printArea();
    }
}
```

```
enter the length and breadth of rectangle
3
4
Area is 12
enter the base and height of triangle
5
6
Area is 15.0
enter the radius of circle
4
Area is 50.24


------------------
(program exited with code: 0)
```