week8a - Notepad

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```
import java.util.Scanner;
abstract class shape
{
        private int a,b;
        void setshape(int x,int y)
        {
                a=x;
                b=y;
        }
        int geta()
        {
                return a;
        }
        int getb()
        {
                return b;
        }
        abstract public void print_area();
}
class rectangle extends shape
{
        private int area_rect;
        rectangle(int x,int y)
        {
                setshape(x,y);
        }
        public void print_area()
        {
                area_rect=geta()*getb();
                System.out.println("Area of rectangle is:"+area_rect);
        }
}
class triangle extends shape
{
        private double area_tri;
        triangle(int x,int y)
        {
                setshape(x,y);
        }
        public void print_area()
        {
                area_tri=(geta()*getb())/2;
```

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```
        public void print_area()
        {
                area_tri=(geta()*getb())/2;
                System.out.println("The area of triangle is:"+area_tri);
        }
}
class circle extends shape
{
        private double area_circle;
        circle(int y)
        {
                setshape(0,y);
        }
        public void print_area()
        {
                area_circle=((3.14)*getb()*getb());
                System.out.println("Area of circle is:"+area_circle);
        }
}
public class week8a
{
        public static void main(String[]args){
                Scanner xx=new Scanner(System.in);
                int a,b;
                System.out.println("Enter the length of rectangle : ");
                a=xx.nextInt();
                System.out.println("Enter the breadth of rectangle : ");
                b=xx.nextInt();
                rectangle r= new rectangle(a,b);
                r.print_area();
                System.out.println("Enter the height of triangle : ");
                a=xx.nextInt();
                System.out.println("Enter the base of triangle : ");
                b=xx.nextInt();
                triangle t= new triangle(a,b);
                t.print_area();
                System.out.println("Enter the radius of circle : ");
                a=xx.nextInt();
                circle c= new circle(a);
                c.print_area();
        }
}
```

Command Prompt

```
C:\Users\anant\JAVA A>javac week8a.java

C:\Users\anant\JAVA A>java week8a
Enter the length of rectangle :
6
Enter the breadth of rectangle :
3
Area of rectangle is:18
Enter the height of triangle :
9
Enter the base of triangle :
3
The area of triangle is:13.0
Enter the radius of circle :
2
Area of circle is:12.56

C:\Users\anant\JAVA A>
```

week8b - Notepad

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```
import java.util.Scanner;

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 number of the customer : ");
                account_no=xx.nextDouble();
                System.out.print("Enter the balance of the customer : ");
                balance=xx.nextDouble();
                account_type=ch;

        }
        void updatebalance(double x)
        {
                balance=balance+x;
        }
        void updatebalance1(double x)
        {
                balance=balance-x;
        }
        double getbalance()
        {
                return balance;
        }
        void displaybalance()
        {
                System.out.println("The balance is : "+balance);
        }
}

class Saving_Account extends Account{
        private double interest_rate;
```

week8b - Notepad

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```
class Saving_Account extends Account{
        private double interest_rate;
        Saving_Account()
        {
                Scanner xx=new Scanner(System.in);
                getdata('S');
                System.out.print("Enter the interest rate : ");
                interest_rate=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()
        {
                double x=(getbalance()*interest_rate)/100;
                updatebalance(x);
                System.out.println("The computed interest is : "+x);
                displaybalance();
        }
        void withdrawl()
        {
                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 withdran is more than the balance enter again : ");
                        x=xx.nextDouble();
                }
                updatebalance1(x);
                displaybalance();
        }
}

class Current_Account extends Account{
        private double min_balance;
```

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File Edit Format View Help

```
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 minimum 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 the check : ");
                double x=xx.nextDouble();
                if(x>(getbalance()-min_balance))
                {
                        System.out.println("You have issued check of more than the minmum balance and you have been charged the penalty of 100 rupees");
                        updatebalance1(100);
                }
                else
                {
                        updatebalance1(x);
                }
                displaybalance();
        }
        void withdrawl()
        {
                System.out.print("Enter the amount to be withdrawn : ");
                Scanner xx=new Scanner(System.in);
                double x=xx.nextDouble();
                while(x>(getbalance()-min_balance))
                {
```

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```
                double x=xx.nextDouble();
                while(x>(getbalance()-min_balance))
                {
                        System.out.println("The amount withdran is more than the balance enter again : ");
                        x=xx.nextDouble();
                }
                updatebalance1(x);
                displaybalance();
        }
}

public class week8b
{
        public static void main(String args[])
        {
                Scanner input=new Scanner(System.in);
                char ch;
                System.out.println("Ebter the type of account you want (C/S) : ");
                ch=input.next().charAt(0);
                if(ch=='S'||ch=='s')
                {
                        Saving_Account s=new Saving_Account();
                        int x=1;
                        while(x!=0)
                        {
                                System.out.println("Enter 0 for exit : ");
                                System.out.println("Enter 1 for deposit : ");
                                System.out.println("Enter 2 for balance enquiry : ");
                                System.out.println("Enter 3 to claculate interest : ");
                                System.out.println("Enter 4 for withdrawl : ");
                                x=input.nextInt();
                                if(x==0)
                                        break;
                                else if(x==1)
                                {
                                        s.getdeposit();
                                }
                                else if(x==2)
                                {
                                        s.displaybalance();
                                }
                                else if(x==3)
```

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```
                        s.displaybalance();
                }
                else if(x==3)
                {
                        s.computeinterest();
                }
                else if(x==4)
                {
                        s.withdrawl();
                }

        }
}
else
{
        Current_Account s=new Current_Account();
        int x=1;
        while(x!=0)
        {
                System.out.println("Enter 0 for exit : ");
                System.out.println("Enter 1 for deposit : ");
                System.out.println("Enter 2 for balance enquiry : ");
                System.out.println("Enter 3 to apply for cheque : ");
                System.out.println("Enter 4 for withdrawl : ");
                x=input.nextInt();
                if(x==0)
                                break;
                else if(x==1)
                {
                        s.getdeposit();
                }
                else if(x==2)
                {
                        s.displaybalance();
                }
                else if(x==3)
                {
                        s.issuecheck();
                }
                else if(x==4)
                {
                        s.withdrawl();
```

week8b - Notepad

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```
                        else if(x==4)
                        {
                                s.withdrawl();
                        }

                }
        }
        else
        {
                Current_Account s=new Current_Account();
                int x=1;
                while(x!=0)
                {
                        System.out.println("Enter 0 for exit : ");
                        System.out.println("Enter 1 for deposit : ");
                        System.out.println("Enter 2 for balance enquiry : ");
                        System.out.println("Enter 3 to apply for cheque : ");
                        System.out.println("Enter 4 for withdrawl : ");
                        x=input.nextInt();
                        if(x==0)
                                        break;
                        else if(x==1)
                        {
                                s.getdeposit();
                        }
                        else if(x==2)
                        {
                                s.displaybalance();
                        }
                        else if(x==3)
                        {
                                s.issuecheck();
                        }
                        else if(x==4)
                        {
                                s.withdrawl();
                        }

                }
        }
    }
}
```

Command Prompt

```
Microsoft Windows [Version 10.0.19041.572]
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C:\Users\anant>cd JAVA A

C:\Users\anant\JAVA A>javac week8b.java

C:\Users\anant\JAVA A>java week8b
Ebter the type of account you want (C/S) :
C
Enter the name of the customer : Ananth G Prabhu
Enter the account number of the customer : 1575855255
Enter the balance of the customer : 6000
Enter the minimum balance : 2000
Enter 0 for exit :
Enter 1 for deposit :
Enter 2 for balance enquiry :
Enter 3 to apply for cheque :
Enter 4 for withdrawl :
1
Enter the amount to be deposited : 5778
Enter 0 for exit :
Enter 1 for deposit :
Enter 2 for balance enquiry :
Enter 3 to apply for cheque :
Enter 4 for withdrawl :
2
The balance is : 11778.0
Enter 0 for exit :
Enter 1 for deposit :
Enter 2 for balance enquiry :
Enter 3 to apply for cheque :
Enter 4 for withdrawl :
3
Enter the amount of the check : 3800
The balance is : 7978.0
Enter 0 for exit :
Enter 1 for deposit :
Enter 2 for balance enquiry :
Enter 3 to apply for cheque :
Enter 4 for withdrawl :
4
Enter the amount to be withdrawn : 900
The balance is : 7078.0
Enter 0 for exit :
Enter 1 for deposit :
Enter 2 for balance enquiry :
Enter 3 to apply for cheque :
Enter 4 for withdrawl :
0
```

Command Prompt

```
Ebter the type of account you want (C/S) :
S
Enter the name of the customer : ANANTH G PRADHU
Enter the account number of the customer : 6879541230
Enter the balance of the customer : 500
Enter the interest rate : 4
Enter 0 for exit :
Enter 1 for deposit :
Enter 2 for balance enquiry :
Enter 3 to claculate interest :
Enter 4 for withdrawl :
1
Enter the amount to be deposited : 6000
Enter 0 for exit :
Enter 1 for deposit :
Enter 2 for balance enquiry :
Enter 3 to claculate interest :
Enter 4 for withdrawl :
2
The balance is : 6500.0
Enter 0 for exit :
Enter 1 for deposit :
Enter 2 for balance enquiry :
Enter 3 to claculate interest :
Enter 4 for withdrawl :
3
The computed interest is : 260.0
The balance is : 6760.0
Enter 0 for exit :
Enter 1 for deposit :
Enter 2 for balance enquiry :
Enter 3 to claculate interest :
Enter 4 for withdrawl :
4
Enter the amount to be withdrawn : 6600
The balance is : 160.0
Enter 0 for exit :
Enter 1 for deposit :
Enter 2 for balance enquiry :
Enter 3 to claculate interest :
Enter 4 for withdrawl :
4
Enter the amount to be withdrawn : 100
The balance is : 60.0
Enter 0 for exit :
Enter 1 for deposit :
Enter 2 for balance enquiry :
Enter 3 to claculate interest :
Enter 4 for withdrawl :
0
```