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abstract class shape{
    int x,y;
    abstract void printArea();
}
class rectangle extends shape
{
    rectangle(int a,int b){
        x=a;
        y=b;
    }
    void printArea(){
        System.out.println("Area of rectangle is "+(x*y));
    }
}
class triangle extends shape
{
    triangle(int a,int b){
        x=a;
        y=b;
    }
    void printArea(){
        System.out.println("Area of triangle is "+(0.5*x*y));
    }
}
class circle extends shape
{
    circle(int a){
        x=a;
    }
    void printArea(){
        System.out.println("Area of circle is "+(3.142*x*x));
    }
}
public class area
{
    public static void main(String[] args) {
        rectangle rect = new rectangle(5,6);
        triangle tri = new triangle(4,3);
        circle cir = new circle(8);
        rect.printArea();
        tri.printArea();
        cir.printArea();
    }
}

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import java.util.Scanner;
class Account

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{
    String name, accnum, acctype;

    double balance;
    Account(){
        /*{
            if(a==1)
                acctype="savings";
            else if(a==2)
                acctype="current";
        }*/

        void input()
        {
            Scanner sc=new Scanner(System.in);

            System.out.println("enter name ,acc number");
            name=sc.next();
            accnum=sc.next();

            System.out.println("enter balance");
            balance=sc.nextInt();

        }

        void displaydetails()
        {
            System.out.println("\nname="+name+"\naccnumber="+accnum+"\nbalance="+b
balance+"\naccount type="+acctype);
        }
        void display()
        {
            System.out.println("balance="+balance);
        }

    }

    class curracct extends Account
    {
        curracct()
        {
            acctype="current";
        }

        double minbal=5000;

        void check()
        {

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        double penalty=100;
        if(balance<minbal)
        {
            balance=balance-penalty;
            System.out.println("penalty is imposed");
            System.out.println("balance="+balance);

        }
        else
        {
            System.out.println("penalty not imposed");
        }
    }

    void deposit()
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("enter amt to deposit:");
        double amt=sc.nextDouble();
        balance=balance+amt;
    }
}

class savacc extends Account
{
    savacc()
    {
        acctype="savings";
    }
    double ci;
    void calcompound(int n,int t)
    {
        ci=balance*(Math.pow((1+(0.2/n)),(n*t)));
        balance=balance+ci;
        System.out.printf("compound interest:%.2f",ci);
        System.out.printf("\nbalance:%.2f",balance);

    }
    void withdrawal(double amt)
    {
        double minbal=5000;
        if(balance<5000)
            System.out.println("amount cant be withdrawn as min balance(5000) constraint will be violated");
        else
            balance=balance-amt;
    }
}

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    void deposit()
    {
        System.out.println("enter amount to deposit: ");
        Scanner sc=new Scanner(System.in);
        double depamt;
        depamt=sc.nextDouble();
        balance=balance+depamt;
        System.out.println("balance="+balance);
    }
}
class AccountMain
{
    public static void main(String[] args)
    {
        Scanner sc=new Scanner(System.in);

        //Account A=new Account();

        System.out.println("enter 1 for savings account 2 for current account
");
        int acctype=sc.nextInt();

        savacc s=new savacc();
        curracct c=new curracct();
        if(acctype==1)
        {

            System.out.println("enter your details: ");
            s.input();
            s.displaydetails();
            System.out.println("number of times interest to be compounded per unit
t(n),time in years");

            int n=sc.nextInt();
            int t=sc.nextInt();
            s.calcompound(n,t);

            int n1=1;
            while(n1==1)
            {

                System.out.println("enter 1.deposit 2.withdrawl 3.exit");
                int w=sc.nextInt();
                if(w==1)
                {
                    s.deposit();

```

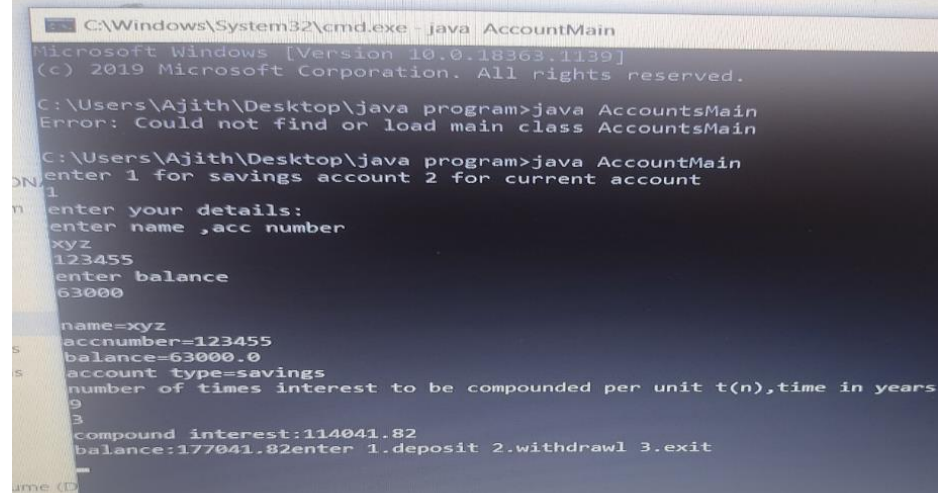
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    }
    else if(w==2)
    {
        System.out.println("enter the amount :");
        double amt=sc.nextDouble();

        s.withdrawal(amt);
        s.display();
    }
    else
    {
        System.exit(0);
    }
}
}

else if(acctype==2)
{
    System.out.println("enter your details: ");
    c.input();
    c.displaydetails();
    c.check();
    c.deposit();
    c.display();
}
}
}

```



```

C:\Windows\System32\cmd.exe - java AccountMain
Microsoft Windows [Version 10.0.18363.1139]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\Ajith\Desktop\java program>java AccountsMain
Error: Could not find or load main class AccountsMain

C:\Users\Ajith\Desktop\java program>java AccountMain
enter 1 for savings account 2 for current account
1
enter your details:
enter name ,acc number
xyz
123455
enter balance
63000

name=xyz
accnumber=123455
balance=63000.0
account type=savings
number of times interest to be compounded per unit t(n),time in years
9
3
compound interest:114041.82
balance:177041.82enter 1.deposit 2.withdrawl 3.exit

```

