A

Journal on

JAVA PROGRAMMING

Submitted

for

Master of Computer Application (MCA)

(MCA-I Sem-II)

At

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Submitted To

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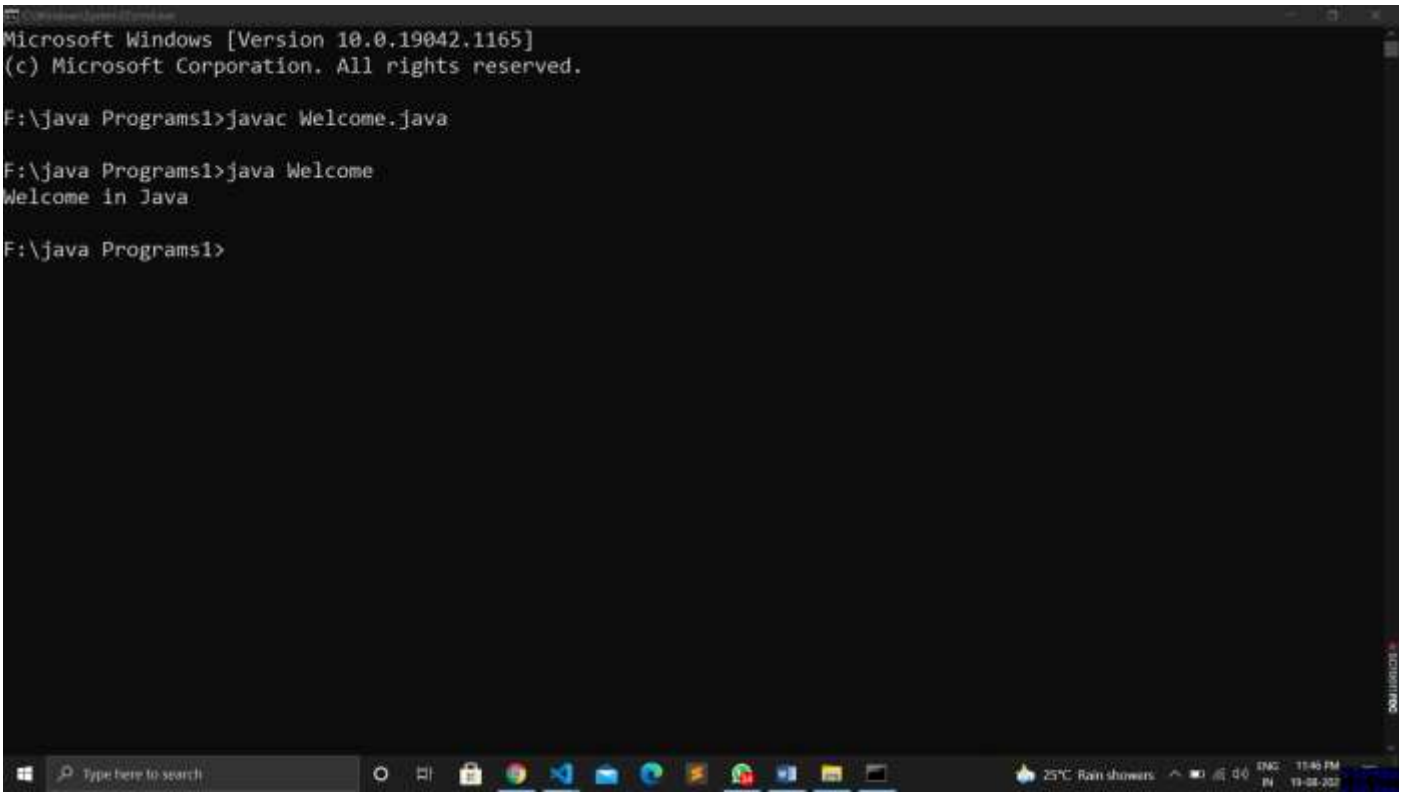
1. Write a program in java that displays Welcome in java.

Input Code:

```
class Welcome{
   public static void main(String[] args){
      System.out.println("Welcome in Java");
   }
}
```

Output:



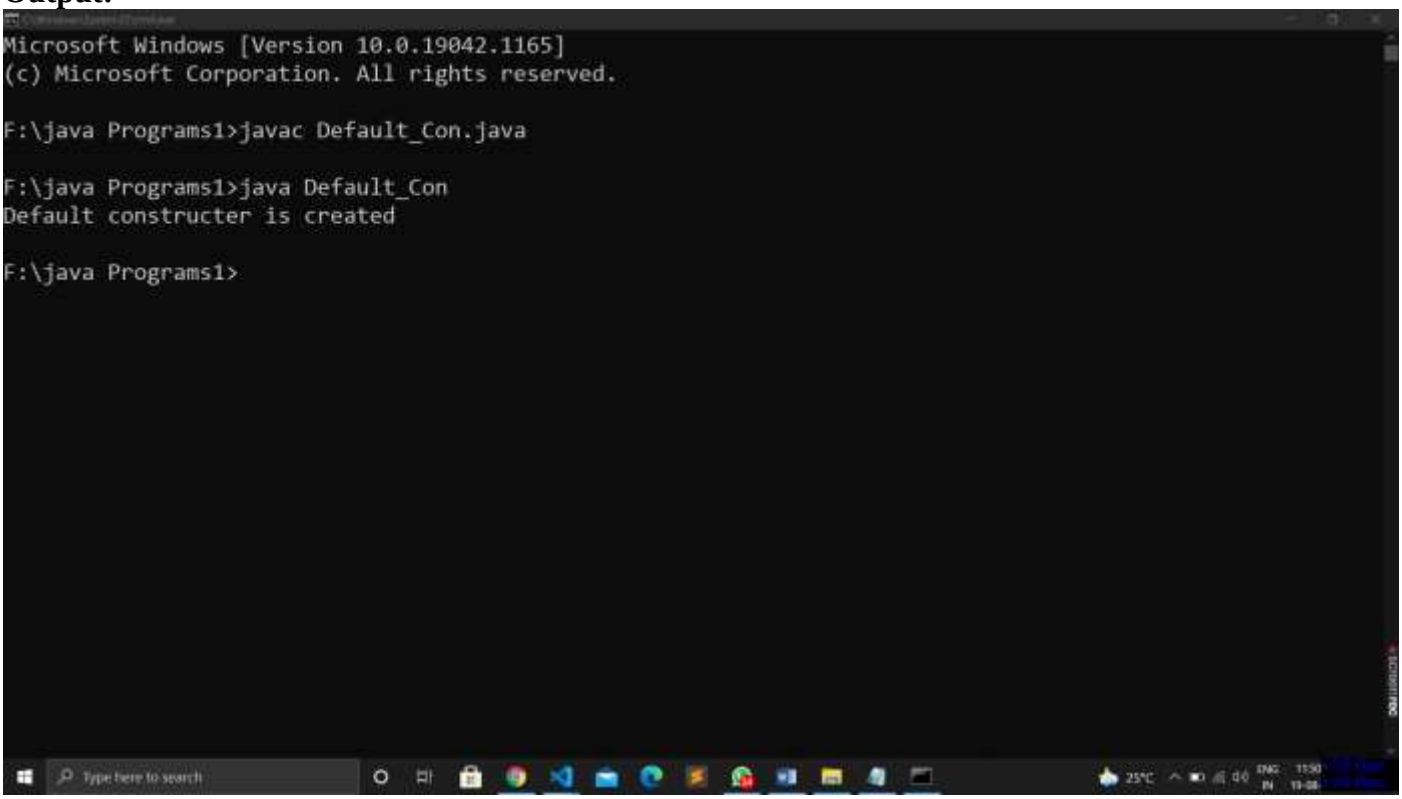
2. Write a program in java that demonstrate the constructor i) default ii) parameterized constructor

i) default constructor

Input Code:

```
class Default_Con{

void display(){System.out.println("Default constructer is created");}

public static void main(String args[]){

Default_Con s1=new Default_Con();

s1.display();
}
}
```

Output:



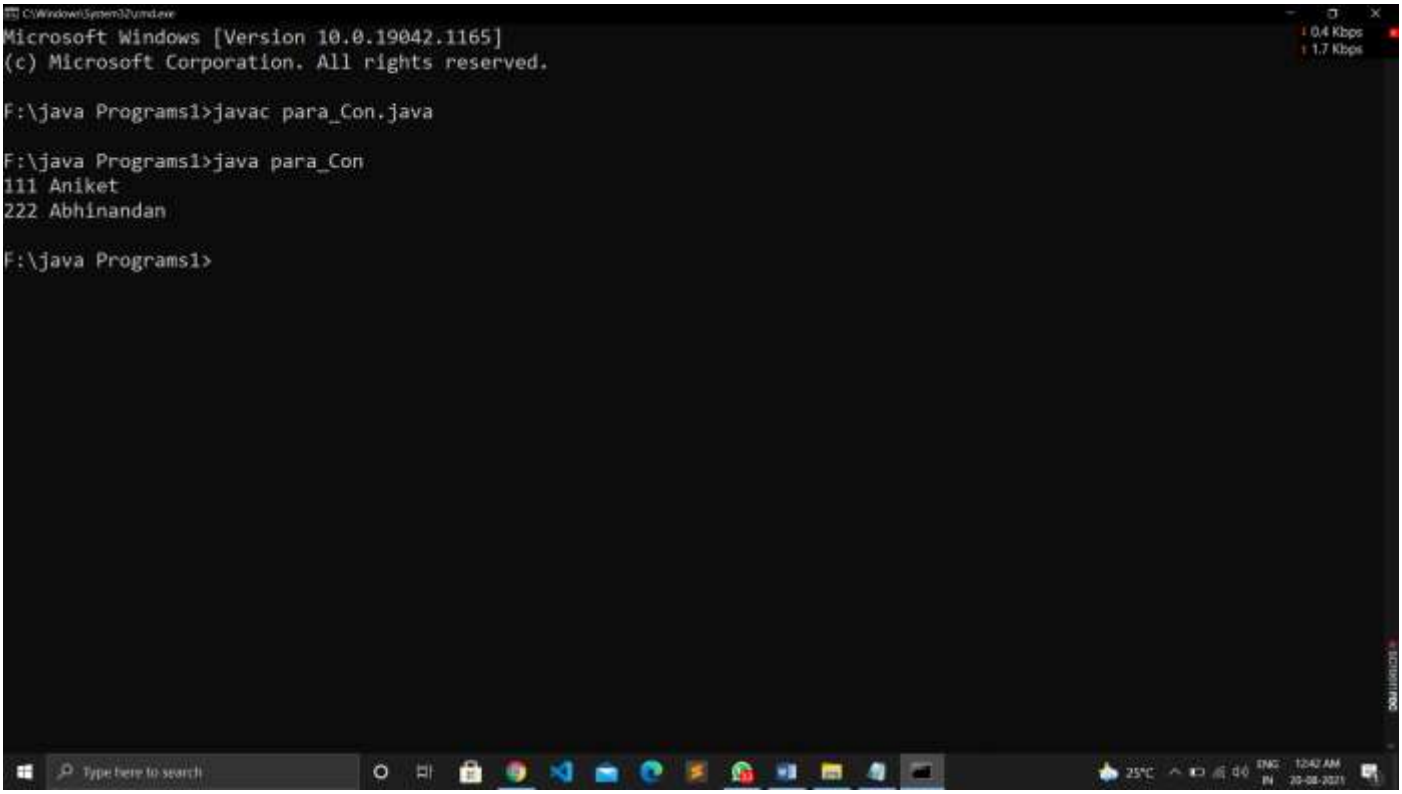
ii) parameterized constructor

Input Code:

```
class para_Con{
   int id;
   String name;


   Student4(int i,String n){
   id = i;
   name = n;
```

```
    }

    void display(){System.out.println(id+" "+name);}

    public static void main(String args[]){

    Student4 s1 = new Student4(111,"Aniket");
    Student4 s2 = new Student4(222,"Abhinandan");

    s1.display();
    s2.display();
   }
}
```

Output:

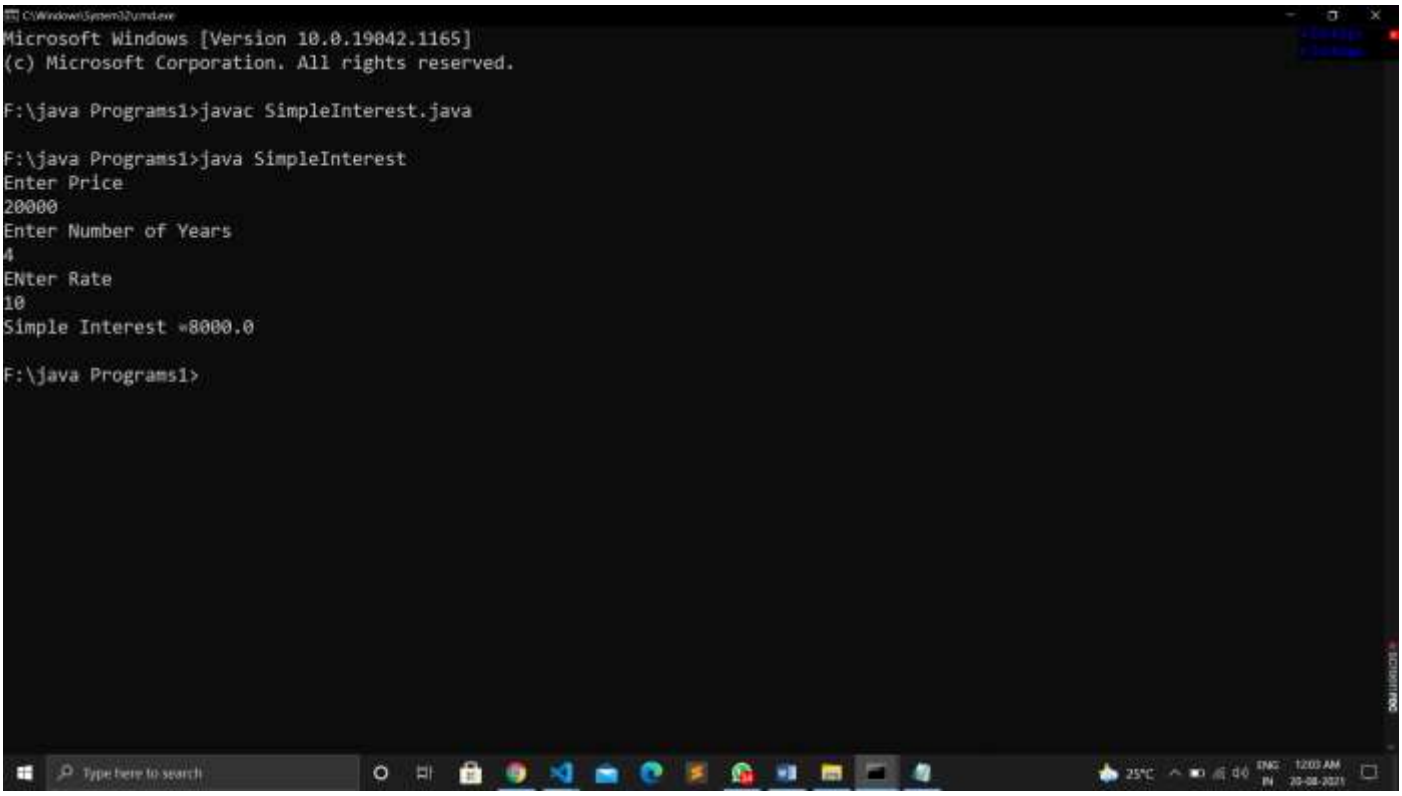


3. . Write a program in java that demonstrate the constructor i) default ii) parameterized constru

Input Code:

```
import java.util.Scanner;
class SimpleInterest{
   public static void main(String[] args){
      Scanner sc = new Scanner(System.in);
      double SI, p,n,r;
      System.out.println("Enter Price");
      p = sc.nextDouble();
            System.out.println("Enter Number of Years");
      n = sc.nextDouble();

      System.out.println("ENter Rate");
      r = sc.nextDouble();

      SI = (p*n*r)/100;

      System.out.println("Simple Interest =" + SI);
   }
}
```

Output:

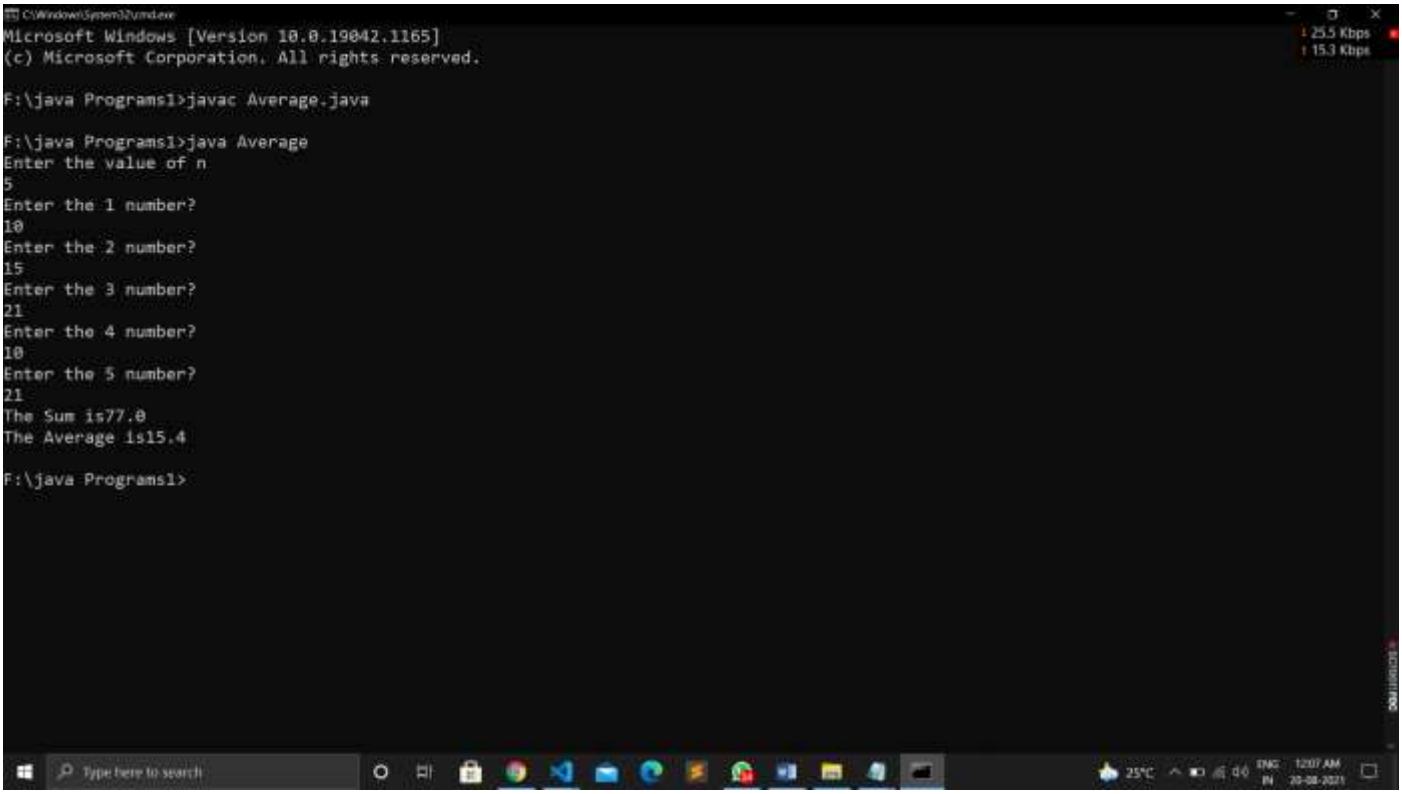


4. Write a program to find the average & the sum of the ‘n’ number using user input.

Input Code:

```
import static java.lang.Float.sum;

import java.util.Scanner;

class Average {

  public static void main(String[] args)

   {

    int n, count = 1;

    float  Number, averageN, sumN = 0;

    Scanner sc = new Scanner(System.in);

    System.out.println("Enter the value of n");

    n = sc.nextInt();

    while (count <= n)

          {

              System.out.println("Enter the "+count+" number?");

              Number = sc.nextInt();

              sumN += Number;

              ++count;

          }

              averageN = sumN/n;

      System.out.println("The Sum is"+sumN);

      System.out.println("The Average is"+averageN);

   }

}
```

Output:



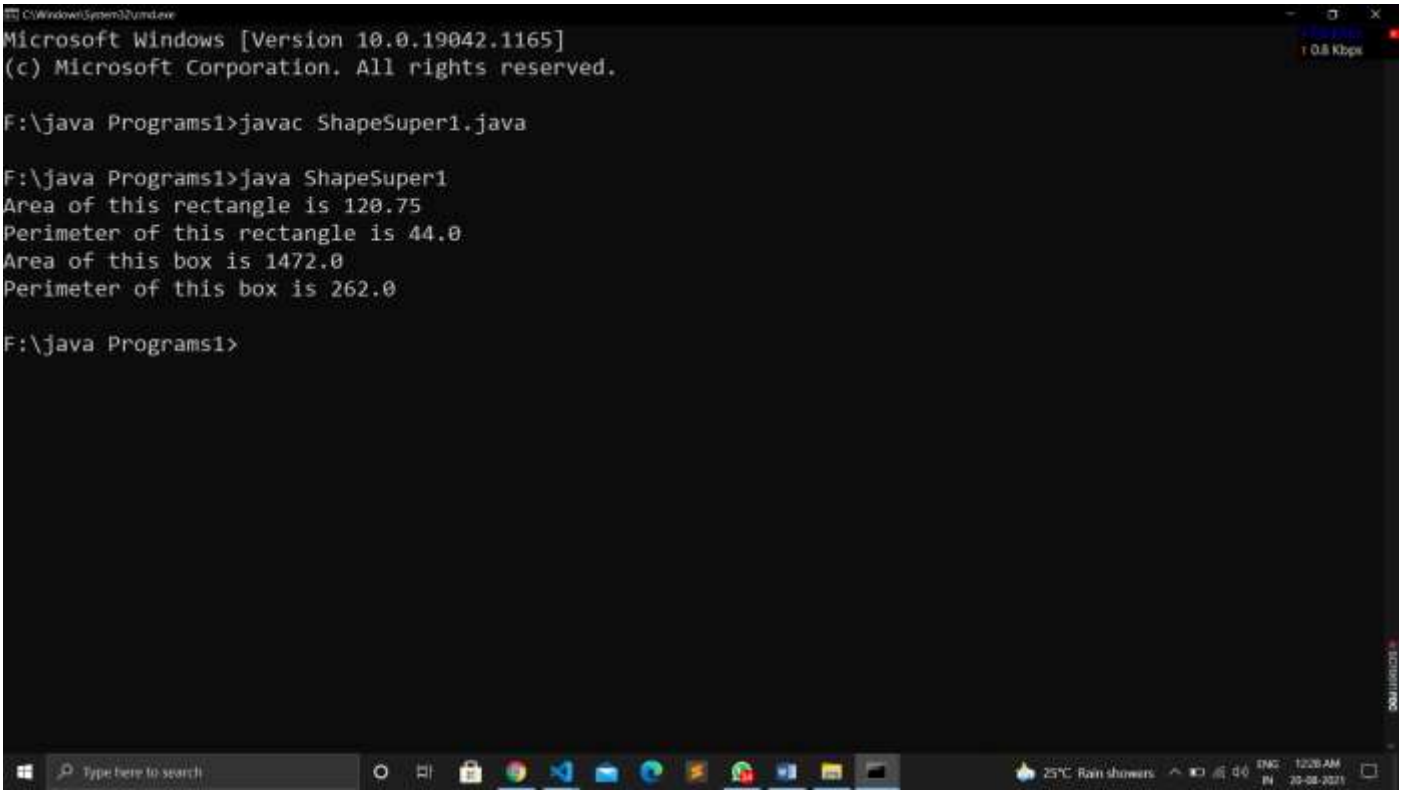
5. Write a program to create a simple class to findout area & perimeter of rectangle & boxes.

Input:

```
class Shape{
   float area,perimeter;

   void area(float length,float breadth){
   this.area=length*breadth;
   }

   void perimeter(float length,float breadth){
   this.perimeter=2*(length+breadth);
   }
}
class Rectangle extends Shape{

   void parameters(float length,float breadth,float perimeter){

   super.area(length,breadth);
   super.perimeter (length,breadth);
   System.out.println("Area of this rectangle is "+super.area);
   System.out.println("Perimeter of this rectangle is "+super.perimeter);
   }

}
class Shape2{
   float area,perimeter;
```

```
    //2*(l*w + l*h + w*h).
    void area(float length,float width,float height){
    this.area=2*((length*width)+(length*width)+(width*height));
    }

    void perimeter(float length,float width,float height){
    this.perimeter=4*(length+width+height);
    }
}
class Abox extends Shape2{

    void parameters(float length,float width,float height){

    super.area(length,width,height);
    super.perimeter (length,width,height);
    System.out.println("Area of this box is "+super.area);
    System.out.println("Perimeter of this box is "+super.perimeter);
    }

}
class ShapeSuper1{
    public static void main(String args[]){
    Rectangle r1=new Rectangle();
    Abox r2=new Abox();

    r1.parameters(10.5f,11.5f,44f);
    r2.parameters(10f,11.5f,44f);

    }
}
```

Output:



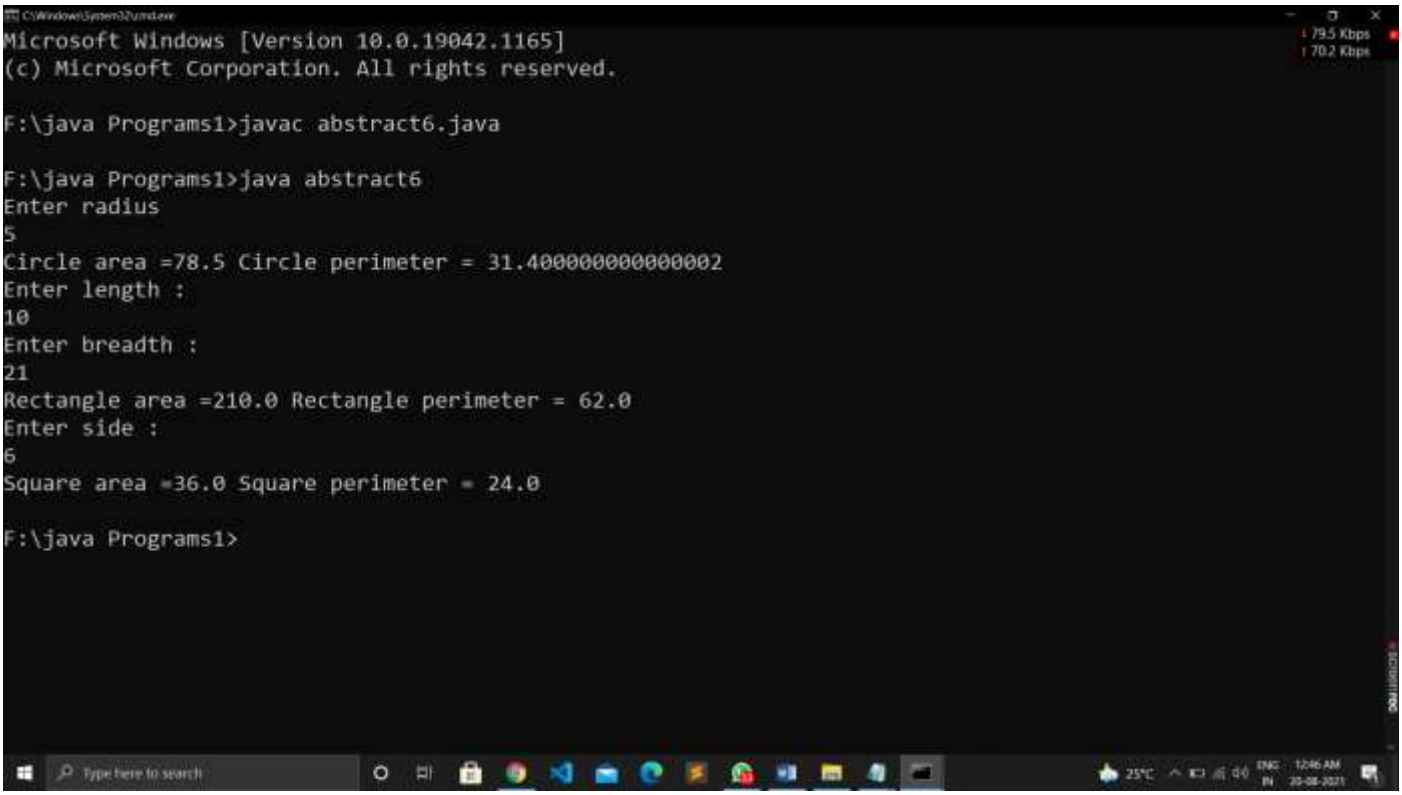
6. Write a program to design a class using abstract method & classes.

Input:

```
import java.util.Scanner;
abstract class Shape{
 abstract public void input();
 abstract public double area();
 abstract public double perimeter();

}
class circle extends Shape{
   double r;
   public void input(){
      Scanner sc = new Scanner(System.in);
      System.out.println("Enter radius");
      r = sc.nextDouble();
   }
   public double area(){
      return 3.14*r*r;
   }
   public double perimeter(){
      return 3.14*2*r;
   }
}
class rect extends Shape{
   double l,b;
   public void input(){
      Scanner sc = new Scanner(System.in);
      System.out.println("Enter length :");
      l = sc.nextDouble();
      System.out.println("Enter breadth :");
      b = sc.nextDouble();
   }
   public double area(){
      return l*b;
   }
   public double perimeter(){
      return 2*l+2*b;
   }
}
class square extends Shape{
   double s;
   public void input(){
      Scanner sc = new Scanner(System.in);
      System.out.println("Enter side :");
      s = sc.nextDouble();
   }
   public double area(){
      return s*s;
   }
   public double perimeter(){
      return 4*s;
```

```
    }
}
class abstract6{
    public static void main(String[] args){
        circle s =new circle();
        s.input();
        System.out.println("Circle area =" + s.area()+" Circle perimeter = "+s.perimeter());
        rect s1 = new rect();
        s1.input();
        System.out.println("Rectangle area =" + s1.area()+" Rectangle perimeter = "+s1.perimeter());
        square s2 = new square();
        s2.input();
        System.out.println("Square area =" + s2.area()+" Square perimeter = "+s2.perimeter());
    }
}
```

Output:

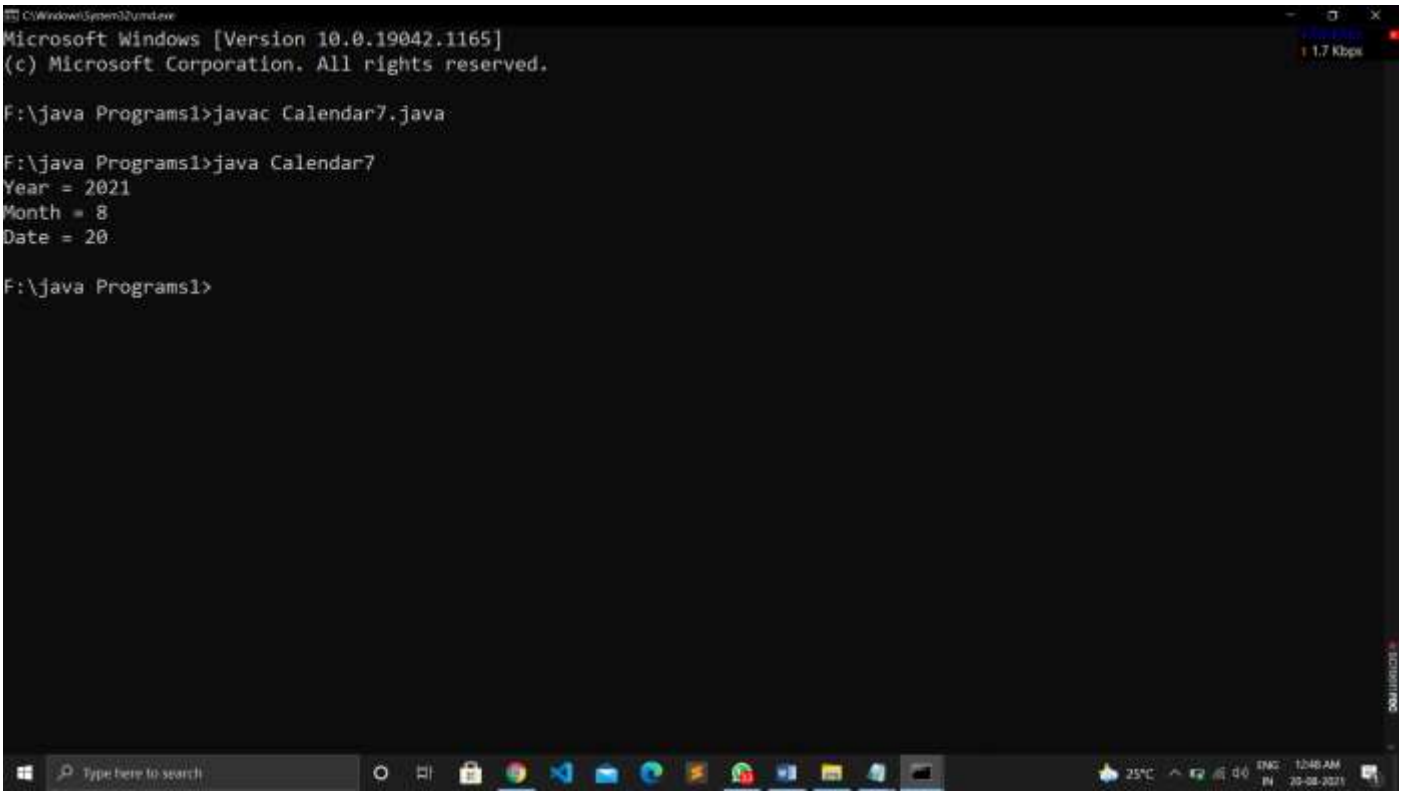


7. write a program using calendar to display Current year, month and date

Input Code:

```
import java.util.Calendar;
class Calendar7{
  public static void main(String[] args) {
    Calendar cal = Calendar.getInstance();
    System.out.println("Year = " + cal.get(Calendar.YEAR));
    System.out.println("Month = " + (cal.get(Calendar.MONTH) + 1));
    System.out.println("Date = " + cal.get(Calendar.DATE));
  }
}
```

Output:

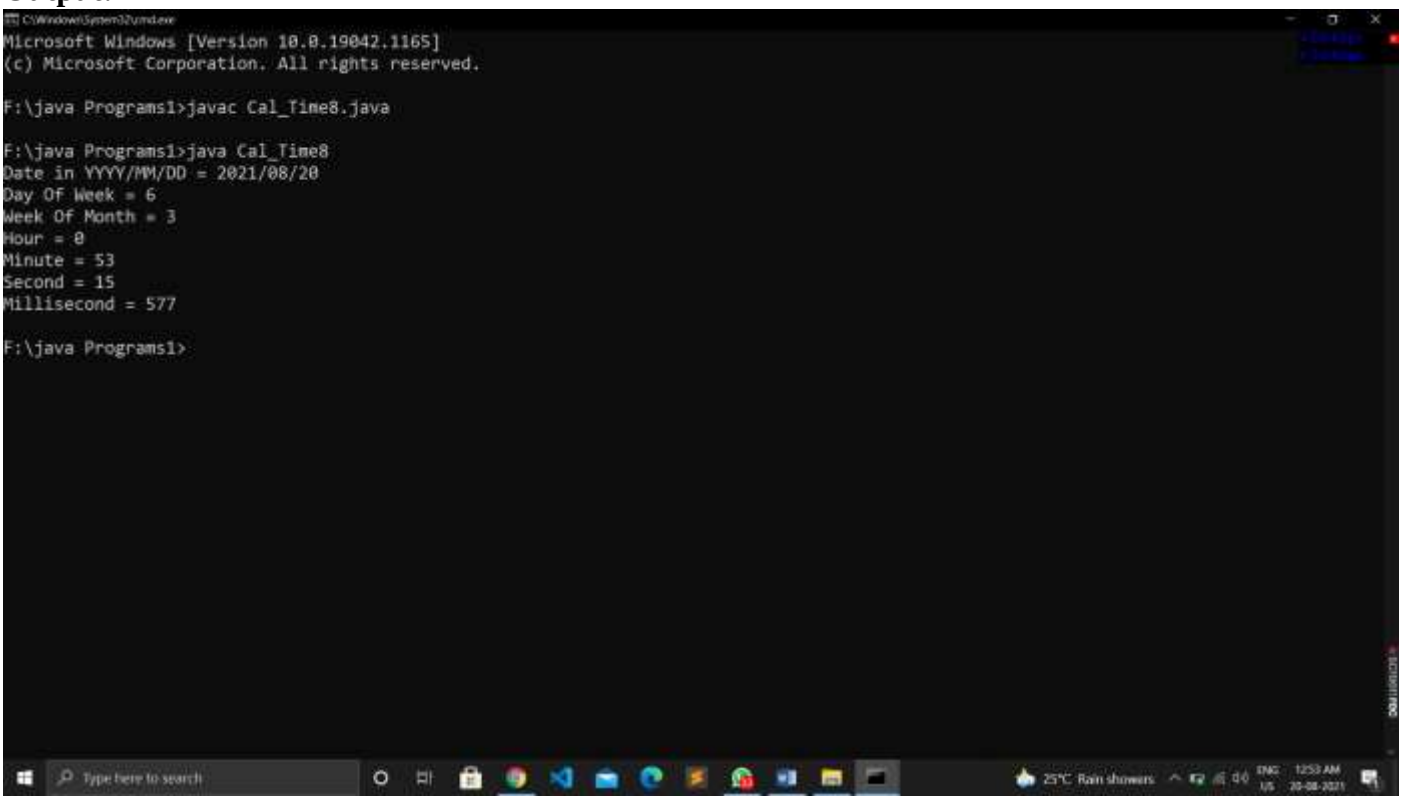


8. write a program using calendar that displays date using YYYY/MM/DD & day of week & week of month , hours, minutes, seconds, millisecond

Input Code:

```
import java.util.Calendar;
import java.text.SimpleDateFormat;
import java.util.Date;
class Calendar8{
  public static void main(String[] args) {
    Calendar cal = Calendar.getInstance();
   Date date = new Date();
        SimpleDateFormat formatter = new SimpleDateFormat("yyyy/MM/dd");
        String strDate= formatter.format(date);
        System.out.println( "Date in YYYY/MM/DD = " +strDate);
   int dayOfWeek = cal.get(Calendar.DAY_OF_WEEK);
   int Weekofmonth = cal.get(Calendar.WEEK_OF_MONTH);

    System.out.println("Day Of Week = " + dayOfWeek);
    System.out.println("Week Of Month = " + Weekofmonth);

    System.out.println("Hour = " + cal.get(Calendar.HOUR_OF_DAY));
    System.out.println("Minute = " + cal.get(Calendar.MINUTE));
    System.out.println("Second = " + cal.get(Calendar.SECOND));
    System.out.println("Millisecond = " + cal.get(Calendar.MILLISECOND));
  }
}
```

Output:

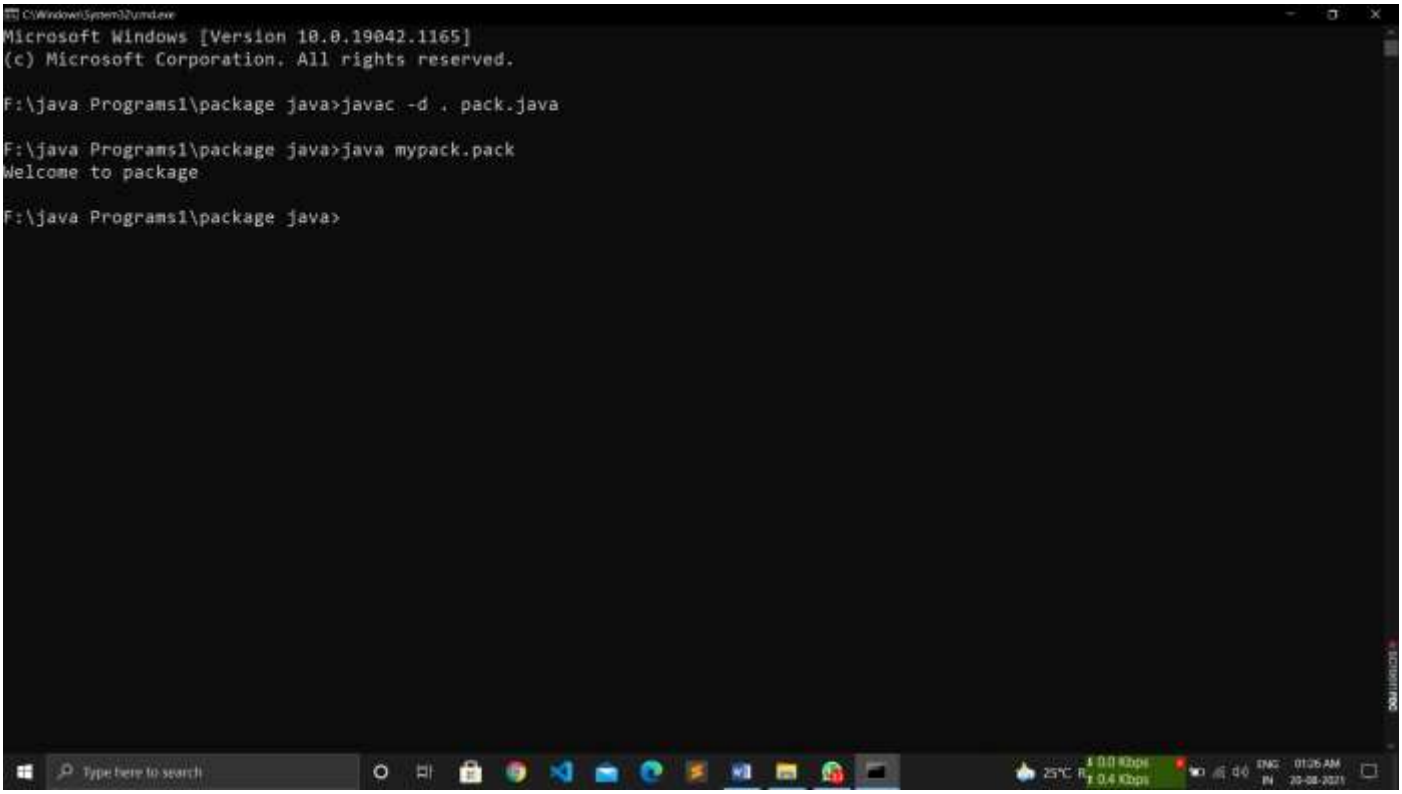

C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19042.1165]
(c) Microsoft Corporation. All rights reserved.
F:\java Programs1>javac Cal_Time8.java
F:\java Programs1>java Cal_Time8
Date in YYYY/MM/DD = 2021/08/20
Day Of Week = 6
Week Of Month = 3
Hour = 0
Minute = 53
Second = 15
Millisecond = 577
F:\java Programs1>
Type here to search
25°C Rain showers
ENG
US
12:53 AM
20-08-2021

9.Write a program to create package that display welcome to package.

Input Code:

```
package mypack;

public class pack{

 public static void main(String args[]){

    System.out.println("Welcome to package");

   }

}
```

Output:



10. Write a program to create package array list using 10 elements.

Input Code:

```
import java.util.ArrayList;
public class ArrayPack
{
	public static void main(String args[])
	{
		int n=10;
		ArrayList<Integer> arr=new ArrayList<Integer>(n);
		for(int i=1;i<=n;i++)
		arr.add(i);
		System.out.print(arr);
	}
}
```

Output: