



## **KALINGA INSTITUTE OF INDUSTRIAL TECHNOLOGY (KIIT)**

Deemed to be University U/S 3 of the UGC Act, 1956

<b>NAME</b>	<b>AARYAN SINHA</b>
<b>ROLL NUMBER</b>	<b>20051796</b>
<b>SECTION</b>	<b>CSE-17</b>
<b>COURSE</b>	<b>WEB TECHNOLOGY</b>
<b>ASSIGNMENT TOPIC</b>	<b>JAVA CODES</b>
<b>ASSIGNMENT NUMBER</b>	<b>5</b>

## ➤ QUESTION 1- CHECK EVEN/ODD

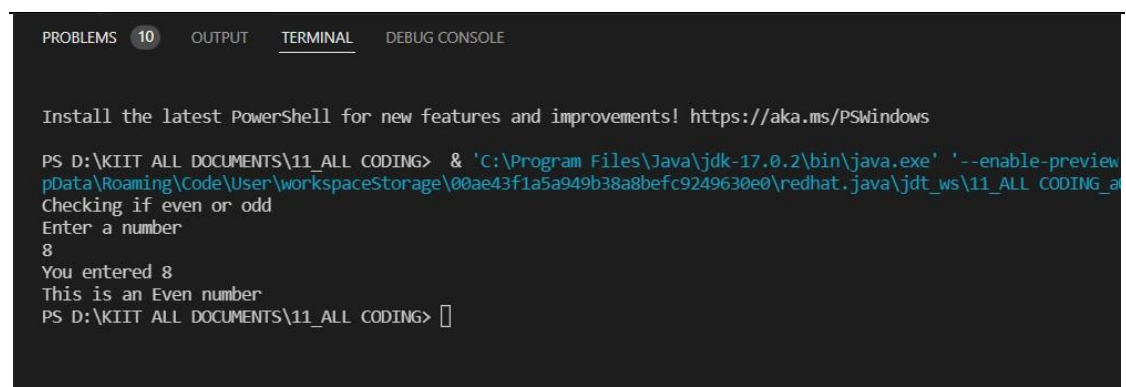
```
import java.util.Scanner;

class q_1_even_odd
{
    public static void main (String [] args)
    {
        // to check a number is even or odd
        System.out.println("Checking if even or odd");
        System.out.println("Enter a number");
        Scanner input = new Scanner(System.in);
        int num= input.nextInt();
        System.out.println("You entered " +num);

        if(num%2==0)
        {
            System.out.println("This is an Even number");
        }
        else
        System.out.println("This is an Odd number");

    }
}
```

## OUTPUT -1



The screenshot shows a terminal window with a dark background. At the top, there are tabs for 'PROBLEMS' (with a count of 10), 'OUTPUT', 'TERMINAL' (which is selected), and 'DEBUG CONSOLE'. The terminal output displays the following text: 'Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows', followed by the command prompt 'PS D:\KIIT ALL DOCUMENTS\11\_ALL CODING>'. The user runs a Java command to execute the program. The program's output is shown: 'Checking if even or odd', 'Enter a number', the user enters '8', 'You entered 8', and 'This is an Even number'. The prompt returns to 'PS D:\KIIT ALL DOCUMENTS\11\_ALL CODING>'.

```
PROBLEMS 10 OUTPUT TERMINAL DEBUG CONSOLE

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS D:\KIIT ALL DOCUMENTS\11_ALL CODING> & 'C:\Program Files\Java\jdk-17.0.2\bin\java.exe' '--enable-preview
pData\Roaming\Code\User\workspaceStorage\00ae43f1a5a949b38a8befc9249630e0\redhat.java\jdt_ws\11_ALL CODING_a
Checking if even or odd
Enter a number
8
You entered 8
This is an Even number
PS D:\KIIT ALL DOCUMENTS\11_ALL CODING> 
```

## ➤ QUESTION 2- AREA AND PERIMETER OF A RECTANGLE

```
import java.util.Scanner;

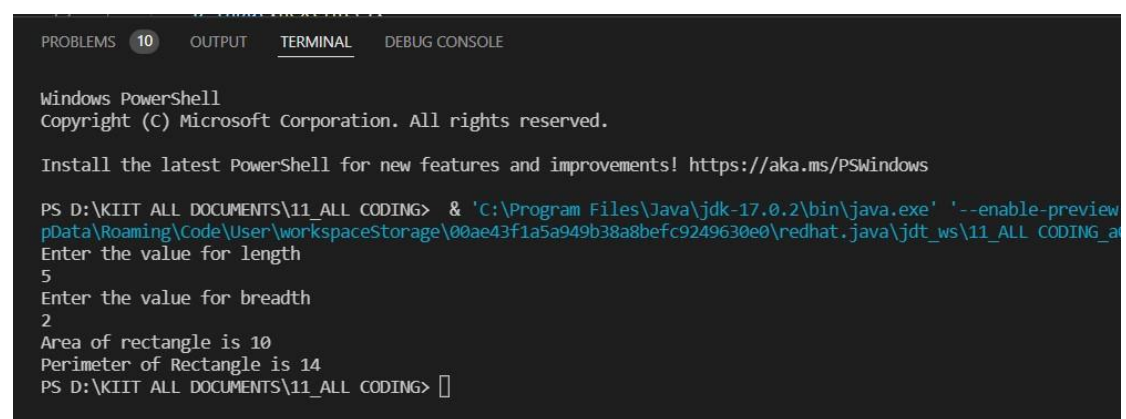
public class q_2_ar_peri_rect
{
    public static void main (String[] args)
    {
        int l,b;
        // to calculate area and peri for rectangle
        System.out.println("Enter the value for length");
        Scanner input= new Scanner(System.in);
        l = input.nextInt();
        System.out.println("Enter the value for breadth");
        b=input.nextInt();

        int area;

        area = l*b;
        System.out.println("Area of rectangle is " + area);

        int peri;
        peri = 2*(l+b);
        System.out.println("Perimeter of Rectangle is " + peri);
    }
}
```

## OUTPUT -2



```
PROBLEMS 10 OUTPUT TERMINAL DEBUG CONSOLE

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

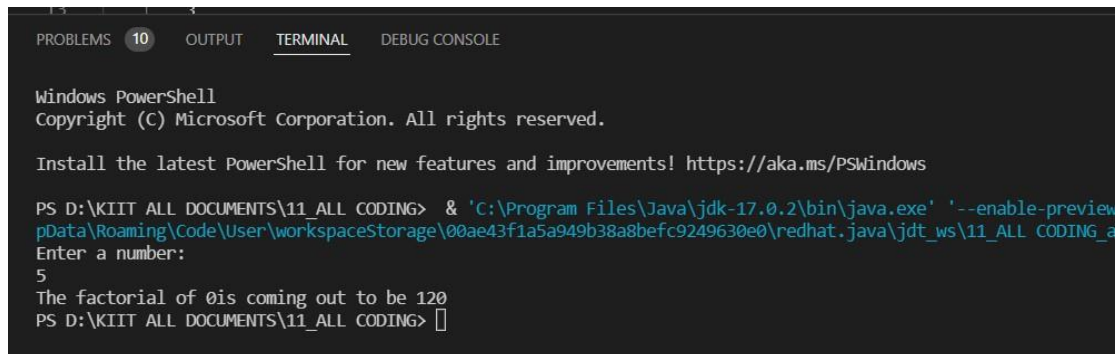
PS D:\KIIT ALL DOCUMENTS\11_ALL CODING> & 'C:\Program Files\Java\jdk-17.0.2\bin\java.exe' '--enable-preview
pData\Roaming\Code\User\workspaceStorage\00ae43f1a5a949b38a8befc9249630e0\redhat.java\jdt_ws\11_ALL CODING_a
Enter the value for length
5
Enter the value for breadth
2
Area of rectangle is 10
Perimeter of Rectangle is 14
PS D:\KIIT ALL DOCUMENTS\11_ALL CODING> 
```

## ➤ QUESTION 3 -FACTORIAL OF AN INTEGER

```
import java.util.Scanner;

public class q_3_fact
{
    public static void main (String[] args)
    {
        System.out.println("Enter a number: ");
        int fact=1;
        int num;
        Scanner input = new Scanner(System.in);
        num = input.nextInt();
        while(num>0)
        {
            fact= fact*num--;
        }
        System.out.print("The factorial of "+num);
        System.out.println("is coming out to be "+fact);
    }
}
```

## OUTPUT -3



The screenshot shows a Windows PowerShell terminal window with the following content:

```
PROBLEMS 10 OUTPUT TERMINAL DEBUG CONSOLE

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS D:\KIIT ALL DOCUMENTS\11_ALL CODING> & 'C:\Program Files\Java\jdk-17.0.2\bin\java.exe' '--enable-preview
pData\Roaming\Code\User\workspaceStorage\00ae43f1a5a949b38a8befc9249630e0\redhat.java\jdt_ws\11_ALL CODING_a
Enter a number:
5
The factorial of 5 is coming out to be 120
PS D:\KIIT ALL DOCUMENTS\11_ALL CODING> 
```

---

## ➤ QUESTION 4 ROOTS OF A QUADRATIC EQUATION

```
import java.util.Scanner;
public class q_4_roots_quad {

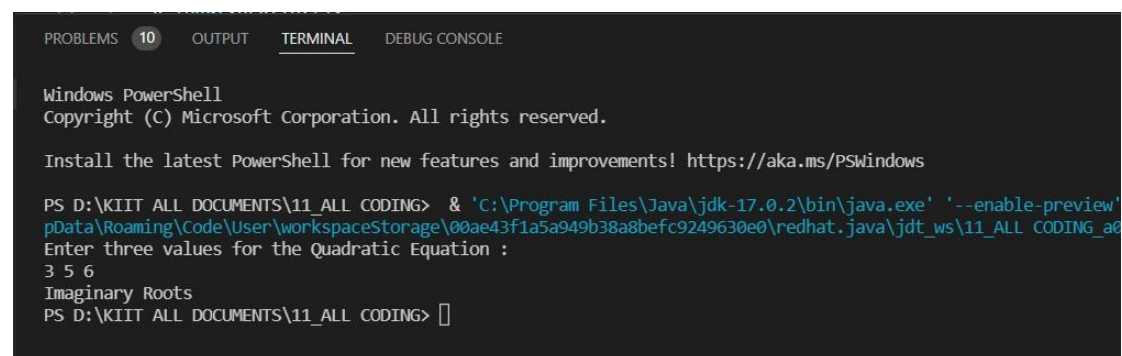
    public static void main(String args[])
```

```

{
    Scanner input= new Scanner(System.in);
    float x, z, y;
    double root1, root2, imaginary, disc;
    System.out.println("Enter three values for the Quadratic Equation : ");
    x=input.nextInt();
    z=input.nextInt();
    y=input.nextInt();
    disc= (z * z) - (4 *x *y);
    if(disc > 0)
    {
        root1 = (-z + Math.pow(disc, 0.5)) / (2 * x);
        root2 = (-z - Math.pow(disc, 0.5)) / (2 * x);
        System.out.println("Two Real Roots Exists: =" +root1+"and"+root2);
    }
    else if(disc == 0)
    {
        root1 = root2 = -z / (2 * x);
        System.out.println("Two Distinct Real Roots Exists: =" +root1);
    }
    else if(disc < 0)
    {
        System.out.println("Imaginary Roots");
    }
}
}

```

## OUTPUT 4



```

PROBLEMS 10 OUTPUT TERMINAL DEBUG CONSOLE

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS D:\KIIT ALL DOCUMENTS\11_ALL CODING> & 'C:\Program Files\Java\jdk-17.0.2\bin\java.exe' '-enable-preview'
pData\Roaming\Code\User\workspaceStorage\00ae43f1a5a949b38a8befc9249630e0\redhat.java\jdt_ws\11_ALL CODING_a0
Enter three values for the Quadratic Equation :
3 5 6
Imaginary Roots
PS D:\KIIT ALL DOCUMENTS\11_ALL CODING>

```

---

## ➤ QUESTION 5- TEMPERATURE CONVERSION

```

import java.util.Scanner;
public class q_5_temp_conv
{
public static void main(String args[])
{ double farh, cel;
Scanner input = new Scanner(System.in);
System.out.println("Choose type of conversion \n 1.Fahrenheit to
Celsius\n 2.Celsius to Fahrenheit");
int ch = input.nextInt();
switch (ch)
{
case 1: System.out.println("Enter Fahrenheit temperature");
farh = input.nextDouble();
cel = (farh - 32) * 5 / 9;
System.out.println("Celsius temperature is = " + cel);
break;
case 2: System.out.println("Enter Celsius temperature");
cel = input.nextDouble();
farh = ((9 * cel) / 5) + 32;
System.out.println("Fahrenheit temperature is = " + farh);
break;
default: System.out.println("please choose valid choice");
}
}
}

```

## OUTPUT

### 1)FARH TO CEL

```

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS D:\KIIT ALL DOCUMENTS\11_ALL CODING> & 'C:\Program Files\Java\jdk-17.0.2\bin\java.exe' '--enabl
pData\Roaming\Code\User\workspaceStorage\00ae43f1a5a949b38a8befc9249630e0\redhat.java\jdt_ws\11_ALL
Choose type of conversion
 1.Fahrenheit to Celsius
 2.Celsius to Fahrenheit
1
Enter Fahrenheit temperature
97.35
Celsius temperature is = 36.30555555555556
PS D:\KIIT ALL DOCUMENTS\11_ALL CODING> 

```

## 2)CEL TO FARH

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS D:\KIIT ALL DOCUMENTS\11_ALL CODING> & 'C:\Program Files\Java\jdk-17.0.2\bin\java.exe' '--enable
pData\Roaming\Code\User\workspaceStorage\00ae43f1a5a949b38a8bafc9249630e0\redhat.java\jdt_ws\11_ALL
Choose type of conversion
1.Fahrenheit to Celsius
2.Celsius to Fahrenheit
2
Enter Celsius temperature
35.63
Fahrenheit temperature is = 96.134
PS D:\KIIT ALL DOCUMENTS\11_ALL CODING> 
```

---

### ➤ QUESTION 6- SECONDS TO HOURS,MINUTES AND SECONDS

```
import java.util.Scanner;

public class q_6_sec_to_hr_min_sec
{
    public static void main(String[] args)
    {
        System.out.println("Time conversion");
        System.out.println("Enter the value for seconds");
        int sec1,hr,min,sec2;
        Scanner input = new Scanner(System.in);
        sec1=input.nextInt();
        hr=sec1/3600;
        min=(sec1%3600)/60;
        sec2=sec1%60;

        System.out.println("The convserion of seconds to hr:min:sec is ");
        System.out.println(hr+":"+min+": "+sec2);

    }
}
```

### OUTPUT

```
PROBLEMS 10 OUTPUT TERMINAL DEBUG CONSOLE

Windows PowerShell
Copyright (c) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS D:\KIIT ALL DOCUMENTS\11_ALL CODING> & 'C:\Program Files\Java\jdk-17.0.2\bin\java.exe' '--enable-preview'
pData\Roaming\Code\User\workspaceStorage\00ae43f1a5a949b38a8befc9249630e0\redhat.java\jdt_ws\11_ALL CODING_a0b
Time conversion
Enter the value for seconds
6468
The convserion of seconds to hr:min:sec is
1:47:48
PS D:\KIIT ALL DOCUMENTS\11_ALL CODING> []
```

---

## ➤ QUESTION 7- DECIMAL TO BINARY

```
import java.util.Scanner;

public class q_7_dec_bina
{
    public static void main(String args[]){
        Scanner input=new Scanner(System.in);
        int n;
        int[] bnum= new int[1000];
        int i = 0;
        System.out.println("Enter the number :");
        n=input.nextInt();
        while (n > 0)
        {
            bnum[i] = n % 2;
            n = n / 2;
            i++;
        }
        for (int j = i - 1; j >= 0; j--)

            System.out.print(bnum[j]);
    }
}
```

## OUTPUT



```
PROBLEMS 10 OUTPUT TERMINAL DEBUG CONSOLE

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS D:\KIIT ALL DOCUMENTS\11_ALL CODING> & 'C:\Program Files\Java\jdk-17.0.2\bin\java.exe' '--enable-preview'
pData\Roaming\Code\User\workspaceStorage\00ae43f1a5a949b38a8befc9249630e0\redhat.java\jdt_ws\11_ALL CODING_ad
Enter the number :
8
1000
PS D:\KIIT ALL DOCUMENTS\11_ALL CODING> 
```

---

## ➤ QUESTION 8- SUM OF DIGITS OF AN INTEGER

```
import java.util.Scanner;
```

```
public class q_8_sum_dig
{
    public static void main(String[] args)
    {
        System.out.println("Enter a number");
        int num;
        int digit; //number to store last digit
        int sum =0; // number to store sum of digit
        Scanner input = new Scanner(System.in);
        num = input.nextInt();

        while(num>0)
        {
            digit=num%10;
            sum+=digit;
            num=num/10;
        }
        System.out.println("The sum of digits are: " + sum);
    }
}
```

## OUTPUT

```
PROBLEMS 10 OUTPUT TERMINAL DEBUG CONSOLE

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

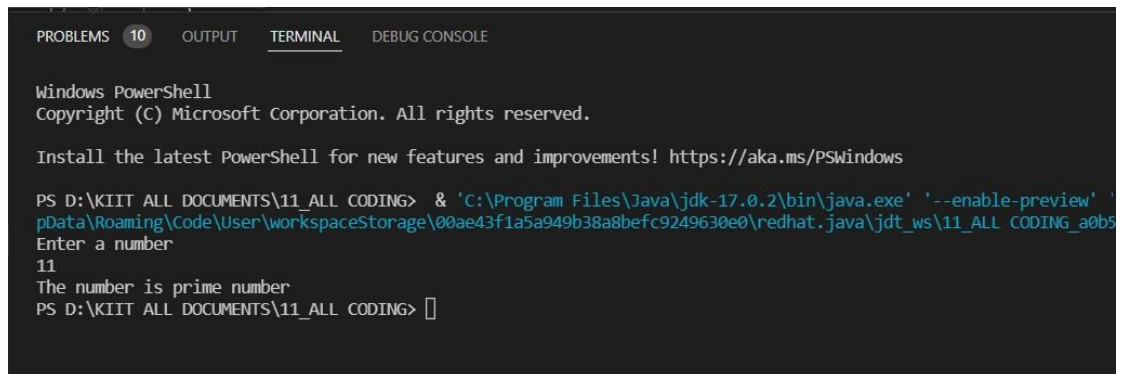
PS D:\KIIT ALL DOCUMENTS\11_ALL CODING> & 'C:\Program Files\Java\jdk-17.0.2\bin\java.exe' '--enable-preview
pData\Roaming\Code\User\workspaceStorage\00ae43f1a5a949b38a8befc9249630e0\redhat.java\jdt_ws\11_ALL CODING_ad
Enter a number
3467
The sum of digits are: 20
PS D:\KIIT ALL DOCUMENTS\11_ALL CODING> 
```

---

## ➤ QUESTION 9- CHECK PRIME

```
import java.util.Scanner;
public class q_9_prime_check {
    public static void main(String[] args)
    {
        System.out.println("Enter a number");
        int num;
        int isPrime = 1;
        Scanner input = new Scanner(System.in);
        num=input.nextInt();
        if(num == 0 || num==1)
        {
            System.out.println("Not a prime number");
        }
        for(int i=2; i*i<num;i++)
        {
            if(num%i==0)
            {
                isPrime=0;
            }
        }
        if(isPrime==1)
        {
            System.out.println("The number is prime number");
        }
        else
        {
            System.out.println("The number is not prime number");
        }
    }
}
```

# } OUTPUT

A screenshot of a Visual Studio Code terminal window. The terminal has tabs for 'PROBLEMS' (with a count of 10), 'OUTPUT', 'TERMINAL' (which is active), and 'DEBUG CONSOLE'. The terminal content shows the Windows PowerShell prompt, copyright information for Microsoft Corporation, and a message to install the latest PowerShell. It then shows a Java command being executed in the PowerShell prompt, which prompts the user to 'Enter a number'. The user enters '11', and the program outputs 'The number is prime number'. The prompt then returns to the PowerShell command line.

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS D:\KIIT ALL DOCUMENTS\11_ALL CODING> & 'C:\Program Files\Java\jdk-17.0.2\bin\java.exe' '--enable-preview' '
pData\Roaming\Code\User\workspaceStorage\00ae43f1a5a949b38a8befc9249630e0\redhat.java\jdt_ws\11_ALL CODING_a0b5
Enter a number
11
The number is prime number
PS D:\KIIT ALL DOCUMENTS\11_ALL CODING> 
```

---

**END**