

Name: Galafshan Parveen Pg-1

Paper code: BCAN 492

Roll no: 15201219063.

## JAVA - ASSIGNMENT

1. Write a java program to print the sum (addition), multiply, subtract, divide and remainder of two numbers taken as command line argument

Solution:-

```
import java.util.Scanner;
public class sum {
    public static void main (String [] args) {
        Scanner in = new Scanner (System.in);
        System.out.print ("Input first number:");
        int num1 = in.nextInt();
        System.out.print ("Input second number:");
        int num2 = in.nextInt();
        System.out.println (num1 + " + " + num2 +
                            " = " + (num1 + num2));
        System.out.println (num1 + " * " + num2 +
                            " = " + (num1 * num2));
        System.out.println (num1 + " - " + num2 +
                            " = " + (num1 - num2));
```

Pg-2

```
System.out.println("num1 + " + num2 +  
" = " + (num1 / num2));  
System.out.println("num1 + " mod " + num2 +  
" = " + (num1 % num2));  
}
```

3      Twisted Way

Output:-

Input the first number: 6

Input the second number: 5

$$6 + 5 = 11$$

$$6 \times 5 = 30$$

$$6 - 5 = 1$$

$$6 / 5 = 1$$

$$6 \bmod 5 = 1$$

Gulafshan Parveen  
15201219063

2. Write a Java program to print that takes a number as input from command line and prints its multiplication table upto 10.

Solutions:-

```
import java.util.Scanner;  
Public class table {  
    public static void main (String[] args){  
        Scanner in = new Scanner (System.in);  
    }  
}
```

Pg-2

num2\*

System.out.print("Input a number: "); Pg-3

int num = in.nextInt();

for (int i=0; i<10; i++) {

System.out.println(num + " \* " + (i+1) +  
= " + (num \* (i+1));

}

}

}

Output:-

Input a number: 5

5 \* 1 = 5

5 \* 2 = 10

5 \* 3 = 15

5 \* 4 = 20

5 \* 5 = 25

5 \* 6 = 30

5 \* 7 = 35

5 \* 8 = 40

5 \* 9 = 45

5 \* 10 = 50.

Gulafshan Parveen  
15205229063

3. Write a java program to print the area and perimeter of a circle. The radius of circle must be taken from keyboard as input.

Solution:

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

```
public class Main {
```

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

```
Scanner in = new Scanner (System.in);
```

System.out.println("Input the radius of  
the circle : ");

double radius = in.nextDouble();

System.out.println("Perimeter is = "+  
(2 \* radius \* Math.PI));

System.out.println("Area is = "+  
(Math.PI \* radius \* radius));

}

}

Gulafshan Paruseen  
15201219863

Output:

Input the radius of the circle : 5

Perimeter is = 31.41592653589793

Area is = 78.53981633974483

4. Write a Java program to print the area and perimeter of a rectangle

Solution :-

```
import java.util.Scanner;  
public class Area_Perimeter  
{  
    public static void main(String[] args){  
        int l, b, perimeter, area;  
        Scanner s = new Scanner(System.in);  
        System.out.print("Width of the rectangle:");  
        b = s.nextInt();  
        System.out.print("Height of the rectangle:");  
        l = s.nextInt();  
    }  
}
```

Pg. 5

area = l \* b;

System.out.println("Area is " + ~~l \* b~~ ~~area~~);

Perimeter = 2 \* (l + b);

System.out.println("Perimeter is " + perimeter);

Output:

width of the rectangle = 5

height of the rectangle = 4

Area is 20

Perimeter is 18

Gulshan Farveen  
(45201217063)

5. Write a java program to print a equilateral triangle using the character '\*'.

Solution: import java.util.\*;

public class equilateraltriangle {

public static void main (String args []) {

System.out.println();

int i, j, n;

Scanner Sc = new Scanner(System.in);

System.out.println ("Enter the Input  
the number of rows : ");

n = Sc.nextInt();

for (i = 1 ; i <= n ; i++)

{

for (j = 1 ; j <= n ; j++)

{

System.out.print ("\*");

}

```

Pg-6 Pg-6
for (j= 1 ; j<=i ; j++)
{
    System.out.print ("*");
}
System.out.println ();
}
}
}

```

Gulshan Parveen  
(15203219063)

Output :

Input the number of rows : 6

```

* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *

```

- 6) Write a java program to convert a decimal number taken as input from keyboard to binary number.

Solution:

```

import java.util.Scanner;
public class as binary {
    public static void main (String [] args) {
        int decimal;
    }
}

```

Pg. 7  
System.out.print("Enter Decimal value:");  
Scanner sc = new Scanner(System.in);  
decimal = sc.nextInt();  
System.out.println("Binary number is:");  
+ Integer.toBinaryString(decimal);  
sc.close();

{

{

Gulafshan Parveen  
(15201219063)Output :-

Enter decimal value: 5

Binary number is : 101.

7) Write a Java program to compare two numbers taken as input from keyboard.

Solution:

```
import java.util.Scanner;  
Public class Assignment7 {  
    Public static void main (String[] args)  
    {  
        Scanner sc = new Scanner (System.in);  
        System.out.print ("Input first integer");  
        int num1 = sc.nextInt();
```

Pg 8

```

System.out.print("Input Second integer:");
int num2 = Sc.nextInt();
if (num1 == num2)
{
    System.out.println(num1 + " = " + num2);
}
else {
    System.out.println(num1 + " != " + num2);
}
if (num1 < num2)
{
    System.out.println(num1 + " < " + num2);
}
else {
    System.out.println(num1 + " > " + num2);
}
if (num1 <= num2)
{
    System.out.println(num1 + " <= " + num2);
}
else {
    System.out.println(num1 + " >= " + num2);
}
}
}

```

Output

Input

Input

25

25

25

8) While

sum 0

as info

Solution:

Imp

Publ

Publ

In

Sc

Sys

num

co

value

{

B-9

Output :-

Input first integer : 25

Input Second integer : 39

$25 < 39$

$25 < 39$

$25 < = 39$ .

Gulafshan Parveen

Roll: 15201219063.

Q) Write a Java program and Compute the sum of the digits of an integer number taken as input from keyboard.

Solution:

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

```
public class Assignment8{
```

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

```
        int number, sum, count;
```

```
        sum = 0;
```

```
        Scanner sc = new Scanner (System.in);
```

```
        System.out.print ("Enter the number is ");
```

```
        number = sc.nextInt();
```

```
        count = number;
```

```
        while (count > 0)
```

```
{
```

```
    sum = sum + number % 10;
```

number = number / 10; Pg- 10

Count = count / 10;

}

System.out.println("The sum of the  
digits is : " + sum);

sc.close();

}

Output:

Input Enter the number is: 25

The sum of the digits is: 7

Q9) Write a Java program to compute the area of a hexagon. The length of a side must be taken as an input from keyboard.

Solution:

```
import java.util.Scanner;  
public class Assignment9 {  
    public static void main(String []args)  
    {  
        double side, area;  
        Scanner sc = new Scanner(System.in);
```

Pg-11

```
System.out.print("Input the length of a side  
of the hexagon:");
```

```
side = sc.nextDouble();
```

```
area = (6 * (side * side)) / (4 * Math.tan  
(Math.PI / 6));
```

```
System.out.println("The area of the  
hexagon is :" + area);
```

```
sc.close();
```

```
}
```

```
}
```

Gulafshan Parveen  
(15201219063)

Output :-

I input - the length of a side of the  
hexagon: 6

The area of the hexagon is : 93.530743  
60871938.

'10) Write a Java program to print the ASCII  
value of a given character.

Solution:

```
import java.util.Scanner;  
public class Assignment 10 {  
    public static void main (String [] args)  
    {  
        char character;
```

Pg-12

```
int number;
Scanner sc = new Scanner(System.in);
System.out.print("Enter the Alphabet value:");
character = sc.next().charAt(0);
number = character;
System.out.print("The value of " +
    character + " is: ");
System.out.println(number);
sc.close();
```

Output:-

Enter the Alphabet value: z

The value of character z is: 90.

Gulafshan Parveen

(roll: 15201219063)