Lab Task – 2

Taking User Input using Scanner class (Solve Any 2)

1. **Take two integer** numbers as input and calculate their **sum**.

2. Calculate the **area of a circle**. Take radius as input.

3. Take **some information about yourself** (i.e. name, age, cgpa, department, section etc) as input and display them.

4. Read **four integer** values named A, B, C and D. Solve the following equation and print the result.
   a) (A * B - C * D)
   b) 2A – B + 3D
   c) $A^2 + B^2 – C^2 + D^2$
   d) $A^3 + B – C^2$

Sample Input	Output Sample
5 6 7 8	Solution of Equation - 1 = -26 Solution of Equation - 2 = 28 Solution of Equation - 3 = 76 Solution of Equation - 4 = 67

Control Statement related Problems (Solve Any 2)

5. Find out the Maximum value from three integer numbers A, B and C.

Sample Input	Output Sample
A = 10 B = 5 C = 50	Maximum Value = 50

6. Create a **grading system** that will display the grade of your obtained mark.

Marks obtained out of 100	Grade	Grade point Equivalent	Remarks
80% and above	A+	4.00	Outstanding
75% to less than 80%	A	3.75	Excellent
70% to less than 75%	A-	3.50	Very Good
65% to less than 70%	B+	3.25	Good
60% to less than 65%	B	3.00	Satisfactory
55% to less than 60%	B-	2.75	Above Average
50% to less than 55%	C+	2.50	Average
45% to less than 50%	C	2.25	Below Average
40% to less than 45%	D	2.00	Pass
Less than 40%	F	0.00	Fail

7. Check whether the input is an **Alphabet** or a **digit** or a **Special Character**. If Alphabet then check whether it is **Vowel** or **Consonant**.

Sample Input	Output Sample
Test Case = 3 6 A @	6 is a Digit A is an Alphabet : It is an Vowel @ is a special character

LOOP related Problems (Any 1)

1. Write a Java program that takes a number as input and prints its **multiplication table** upto 10.

Sample Input	Output Sample
Input a number: 8	8 x 1 = 8 8 x 2 = 16 8 x 3 = 24 ... 8 x 10 = 80

2. Write a Java program to print all the numbers between **1** and **100** which are **dividable by 3 and 6** except **30, 60 and 90**.

3. Write a Java Code to check whether an Input is a **Prime** number or not.

Sample Input	Output Sample
Test Case =2 5 6	5 is a prime number 6 is not a prim number