**P12 exercises**

**Question 1**

Considering the following lines of codes. Without testing them in any IDE. Write down the exact output of the whole java program. You do not need to test it in any environment.

import java.awt.\*;

public class PointOne {

public static void main(String[] args) {

private int m=32;

private int n=24;

Point pointOne=new Point(n, m);

System.out.println("The value of pointOne is "+"\n"+pointOne);

}

}

**Question 2**

In eclipse Integrated Development Environment, write a java program that prompts you to enter both your name and surname as strings. The program should return a concatenation of both names and their length. [Hint: Each name and their concatenation should be printed on lines].

Eg.

**Sample input:**

Name1

Name2

**Sample output:**

Name1Name2.

**Question3:**

Write a java program that prompts the user to enter two integer number s x and y and return the highest number.

**Question4:**

Write a java program that prompts you to enter a string of your choice. The program should check the repetitive number of characters in the same string and return it as the output.

**Question 5.**

Factorials are used frequently in probability problems. The factorial of a positive integer n (written n! and pronounced “n factorial”) is equal to the product of the positive integers from 1 to n. Write an application that calculates the factorials of 1 through 20. Use type long. Display the results in tabular format. What difficulty might prevent you from calculating the factorial of 100?

Update your program to prompt the user to enter a number less than 20 and print its factorial! If the number is greater than 20, tell the user that “Number out of range!”