République Algérienne Démocratique et Populaire

Ministère de l'Enseignement Supérieur Et de la recherche Scientifique

Université Batna 2

Programmation orientée objet (TP)

Methods in Java – TP02 --

Exercise 01:

Write a method called **printName** with a **String** parameter named **name.**
The method should not return any value and is used to print the name of the user with a welcome message.

Exercise 02:

Write a method called **intSum** with **2** parameters of type **int.**
The method should return the sum of the two numbers of type **int.**

Exercise 03:

Write a method called **isMajor** with a **short** parameter named **age.**

The method should return **True** if age is greater or equal to 18 otherwise should return **False.**

Exercise 04:

Write a method called **isPair** with an **int** parameter named **number.**

This method should return **True** If the number is Pair otherwise should return **False.**

Exercise 05:

Write a method called **maxValue** with 3 parameters of type **Double.**

This method should return the **maximum value** among these three values.

Exercise 06:

Write a method called **MultiplicationTable** with an **int** parameter named **number.**

The method should not return any value and print the multiplication table of the given **number** up to 10.

Exercise 07:

Write a method called factorial with a **short** parameter named **n.**

This method should return the factorial of the number **n** as a **Long.**

Exercise 08:

Write a method called **positiveNumber** with no parameter.

This method should keep asking the user to enter a number till the user enter a positive number. And then return that positive number as an **int.**

Challenge 01:

Write a method **printYearsAndDays** with **parameter** of type **long** named **minutes.**

The method should not return any value and it needs to calculate the **years and days** from the **minutes** parameter.

If the parameter **is less than 0,** print text **"Invalid Value".**

Otherwise, if the parameter is valid then it needs to print a message in the format "**XX** min = **YY** years and **ZZ** days".

XX represents the original value **minutes**.

YY represents the calculated **years**.

ZZ represents the calculated **days**.

Example: 561600 min = **1** years and **25** days.

Challenge 02:

Write a method named **getGreatestCommonDivisor** with two parameters of type **int** named **first** and **second.**

If one of the parameters is < 10, the method should **return -1 to indicate an invalid value.**

The method should return the greatest common divisor of the two numbers (int).

The greatest common divisor is the largest positive integer that can **fully divide each of the integers (i.e., without leaving a remainder).**

For example, 12 and 30:

12 can be divided by 1, 2, 3, 4, **6,** 12

30 can be divided by 1, 2, 3, 5, **6,** 10, 15, 30

The greatest common divisor is 6 since both 12 and 30 can be divided by **6,** and there is no resulting remainder.