

JAVA SEMINAR

DAY 01 - HELLO WORLD



JAVA SEMINAR



To run this pool, you need Java to be installed on your computer. We are here talking about **JSE**, that you could easily find on Internet.

In Java, every line of code must be included into a class.

There must also be one file by class (and one class by file) named the same way. Here is a very first example of Java code (necessary in a file name "HelloWorld.java"):

```
public class HelloWorld {
    public static void main(String[] args) {
        System.out.println("Hello World!");
    }
}
```

Then this code is compiled with



and executed:





Sure this code snippet displays "Hello World!" when you execute it.



Have you seen the "main" function? Why is it special?

For all the following exercises, your functions must be included in a class named the same way as the file to turn-in.

For instance if the file to turn-in is $\mathtt{Ex00.java}$ then the class must be as follow:

```
class Ex00 {
    public static void myMethod() {
    }
}
```

7



Exercise 01

Delivery: ./ex_01/Ex01.java

Restrictions: System.out.print is mandatory, and must be used only once.

Prototype: public static void myConcat(String str1, String str2);

Create a myConcat function that takes two parameters and displays the first parameter followed by a space followed by the second parameter.



Exercise 02

Delivery: ./ex_02/Ex02.java

Restrictions: the for keyword is mandatory
Prototype: public static String getAngryDog(int nbr);

Write a function that takes a nbr integer as parameter and returns nbr times the word "woof", followed by a newline.





Exercise 03

Delivery: ./ex_03/Ex03.java

Restrictions: the for keyword is mandatory.

Prototype: public static void printArray(ArrayList<String> myArray);

Write a function that takes a myArray ArrayList as parameter and displays each of its value followed by a newline.

```
Terminal - + x
T-JAV-500> Ex03.printArray([Volvo, BMW, Ford, Mazda]);
Volvo
BMW
Ford
Mazda
```

Exercise 04

Delivery: ./ex_04/Ex04.java

Restrictions: the switch keyword is mandatory.

Prototype: public static void printMovieFromNbr(int nbr);

Write a function that takes an integer as parameter and displays

- \checkmark The Three Brothers when the value is 3;
- ✓ The Sixth Sense when the value is 6;
- ✓ The Number 23 when the value is 23;
- ✓ 28 Days Later when the value is 28;
- ✓ I don't know. Otherwise.





A new line must be printed after each display.

Terminal - + x

T-JAV-500> Ex04.printMovieFromNbr(23);

The Number 23

Exercise 05

Delivery: ./ex_05/Ex05.java

Prototype: public static ArrayList<String> myGetArgs(String... var);

Write a function that takes as parameter a variable number of arguments and returns these arguments in an array.

Exercise 06

Delivery ./ex_06/Ex06.java
Prototype: public static void sequence(int nbr);

Write a function that outputs the following sequence to the n^{th} iteration. Here is the beginning of the sequence:

4



111221 312211



The first iteration is 0. Don't print anything when the number is negative.

```
Terminal - + x
T-JAV-500> sequence(0);
1

Terminal - + x

T-JAV-500> sequence(3);
1
11
21
1211
```

