# Welcome to the Java Course

Module 1 – Day 05

#### **Content of the course**

introduction to programming	
Basic programming concepts	Day 1
Variables and Data Types	
Conditionals	Day 2
Loops	Day 3
<b>Control Structures</b>	
Introduction to algorithms	

#### **Project Students - Step 4**

Modify the program to allow the registration of more students. Then print the list of all students.

```
How many students do you want to register? 3
>>> Student 1 <<<
Enter first name: Ana
Enter last name: Gaggero
Enter birthday (day of month): 22
Enter birth month: 10
Enter birth year: 1982
Enter course registered: Java
>>> Student 2 <<<
Enter first name: Carol
Enter last name: Muller
Enter birthday (day of month): 12
```

#### **Project Students - Step 4**

```
>>> Student 3 <<<
Enter first name: Tom
Enter last name: Grass
Enter birthday (day of month): 7
Enter birth month: 1
Enter birth year: 1980
Enter course registered: Java
List of registered students:
Ana Gaggero, 22 October 1982, Java
Carol Muller, 12 April 1990, Python
Tom Grass, 7 January 1980, Java
```

## Project Tic Tac Toe Step 4

- Check if someone won.
   Print the winner and exit the game.
- Otherwise, print that it was a tie

```
Juan choose your move: 7
    2 | 3
   | X | 6
   | 8 | 9
Ana choose your move: 9
    2 3
   | X | 6
Ana won!
```

#### Survey



https://www.dlh.lu/survey/start/230d40d9-efe1-43a5-9d79-e03771a736ec

#### Output

```
System.out.printf("His name is %s.%n", "John");
System.out.printf("He is %d years old.%n", 35);
System.out.printf("Height: %f meters tall.%n", 1.75);
```

#### Output

```
System.out.printf("His name is %s.%n", "John");
System.out.printf("He is %d years old.%n", 35);
System.out.printf("Height: %f meters tall.%n", 1.75);
```

His name is John.

He is 35 years old.

Height: 1.750000 meters tall.

#### If you're ever in need to check the MIN or MAX value of a type

```
System.out.println(Integer.MAX VALUE);
System.out.println(Integer.MAX VALUE);
System.out.println( Double.MAX VALUE );
System.out.println( Double.MIN VALUE );
System.out.println(Float.MAX VALUE);
System.out.println(Float.MIN VALUE);
System.out.println( Long.MAX VALUE );
System.out.println(Long.MIN VALUE);
2147483647
2147483647
1.7976931348623157E308
4.9E-324
3.4028235E38
1.4E-45
9223372036854775807
-9223372036854775808
```

#### Output

#### ANSI escape Codes for colours and style

```
    Colours
        ("\033[31mRed Text\033[0m");
-> Red Text
    Bold
        ("\033[1mBold Text\033[0m");
-> Red Text
    Italic
        ("\033[3mItalic Text\033[0m");
-> Red Text
```

#### Ternary operations

## Assign a value to a variable based on a condition

```
1 condition ? expression1 : expression2;
1 int a = 10, b = 5;
2 int max = (a > b) ? a : b;
3 System.out.println("The maximum value is " + max);
```

#### Ternary operations

```
int a = 10;
int b = \overline{5};
int max;
max = (a > b) ? a : b;
if (a > b)
   max = a;
else
   max = b;
System.out.println("Max value is"+max);
```

### Now YOUR TURN!

Exercises

#### **Project Students - Step 5**

Modify the program to print the list of students with the following format:

List of registered students:

Ana Gaggero born the 22 of October 1982. Registered to Java Carol Muller born the 12 of April 1990. Registered to Python Tom Grass born the 07 of January 1980. Registered to Java

Use a ternary function to print "07" for the last student's birth day instead of just the number "7"

## Thank you!