What is Java?

Java is a popular programming language, created in 1995.

It is owned by Oracle, and more than **3 billion** devices run Java.

It is used for :

* Mobile applications (specially Android apps)
* Desktop applications
* Web applications
* Web servers and application servers
* Games
* Database connection
* And much, much more !

Java Variables

Variables are containers for storing data values.

In Java, there are different **types** of variables, for example:

* String - stores text, such as "Hello". String values are surrounded by double quotes
* int - stores integers (whole numbers), without decimals, such as 123 or -123
* float - stores floating point numbers, with decimals, such as 19.99 or -19.99
* char - stores single characters, such as 'a' or 'B'. Char values are surrounded by single quotes
* boolean - stores values with two states: true or false

To create a variable, you must specify the type and assign it a value:

*type variable = value;*

Example: String name = “Yassir”;

int num = 15;

Boolean bool = true;

Java Data Types

Data types are divided into two groups:

Primitive data types - includes byte, short, int, long, float, double, boolean and char

Non-primitive data types - such as String, Arrays and Classes

Java Arrays

Arrays are used to store multiple values in a single variable, instead of declaring separate variables for each value.

To declare an array, define the variable type with square brackets:

String[] cars = {"Volvo", "BMW", "Ford", "Mazda"};

int[] myNum = {10, 20, 30, 40};

Java Methods

Methods are used to perform certain actions, and they are also known as functions.

Example :

public class Main {

static void myMethod() {

// code to be executed

}

}

To call a method in Java, write the method's name followed by two parentheses () and a semicolon

Java provides some pre-defined methods, such as:

System.out.println() is a statement which prints the argument passed to it.

nextBoolean() Reads a boolean value from the user

nextByte() Reads a byte value from the user

nextDouble() Reads a double value from the user

nextFloat() Reads a float value from the user

nextInt() Reads a int value from the user

nextLine() Reads a String value from the user

nextLong() Reads a long value from the user

nextShort() Reads a short value from the user

Arrays.toString() Returns a string representation of the contents of the specified array

size() used to get the number of elements in this list

add() to add items

remove() To remove an item

clear() To remove all items