

# Java variable and data types

## Assignment solution

1. What is statically typed and Dynamically typed Programming Language?

Statically typed: if the memory of the variable is given during the compilation time itself then such types of programming languages are called as "Statically typed".

Eg: C,C++,Java

Dynamically typed: If the memory of the variable is given during the execution time itself then such types of programming languages are called ``dynamically typed".

Eg: Python,PHP,JavaScript

2. What is the variable in Java?

: A variable is the title of a reserved region allocated in memory. In other words, it may be referred to as the name of a memory location.

It is a container that holds the value while the Java Program is executed.

Each variable should be given a unique name to indicate the storage area.

A variable is assigned with a data type(we will learn about it after this topic).

Syntax for Declaring a Variable:

Type variable\_name [= value];

The variable\_name is the name of a variable. We can initialise the variable by specifying an equal sign and a value However, the compiler never assigns a default value to an uninitialized local variable in Java.

3. How To Assign a Value To Variable?

We use assign operator (=) to assign a value to a variable. For Example,

number = 10;

flag = true;

name = "CodePumpkin";

We can assign a value to a variable any number of times in Java, but when we assign a new value to a variable, the old value will be overwritten.

4. What are Primitive Data types in Java?

byte, short, int, long, float, double, char, String, boolean.

5. What are the Identifiers in Java?

Identifiers in Java are symbolic names used for identification. They can be a class name, variable name, method name, package name, constant name, and more. However, In Java , There are some reserved words that can not be used as an identifier.

5. List the Operators in Java?

Operators in JavaF

- Arithmetic Operator
- Relational Operator
- Logical Operator
- Assignment Operator
- Unary Operator
- Bitwise Operators

6. Explain about Increment and Decrement operators and give an examples

Ans: Increment and Decrement Operators in Java are used to increase or decrease the value by 1. For example, Incremental operator `++` is useful to increase the existing variable value by 1 (`i = i + 1`). Moreover, the Decrement operator `--` is useful to decrease or subtract the current value by 1 (`i = i - 1`). The syntax of both increment and decrement operators in Java Programming to preFix or postFix is

Increment Operator E `++x` or `x++`

Decrement Operator E `--x` or `x-`