

# Java Variables and Data types

## Assignment Solutions



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

**Ans:** 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 as “dynamically typed”.

**Eg:** Python,PHP,JavaScript

## 2. What is the variable in Java?

**Ans:** 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 (initialization i.e. assigning an initial value, is optional). However, the compiler never assigns a default value to an uninitialized local variable in Java.

## 3. How To Assign a Value To Variable?

**Ans:** 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.

For example, in the first code snippet, we have first assigned a value 10 to the number and then modified its value by performing the number+20 operation and assigning it back to the variable number by .

## 4. What are Primitive Data types in Java?

**Ans:** byte, short, int, long, float, double, char, String, boolean.

## 5. What are the Identifiers in Java?

**Ans:** 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?

**Ans:** Operators in Java:

- Arithmetic Operators
- Relational Operators
- Logical Operators
- Assignment Operators
- Unary Operators
- 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 : ++x or x++

Decrement Operator: --x or x--



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