27 Jan 2023 Java Variables and Data types Assignment

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

Ans. A statically-typed language is a language (such as Java, C, or C++) where variable types are known at compile time.

Dynamically-typed languages are those (like JavaScript) where the interpreter assigns variables a type at runtime based on the variable's value at the time.

Que. 2. What is the variable in Java?

Ans. A variable is a container which holds the value while the Java program is executed.

Que. 3. How to assign a Value to variable?

Ans. DataType variableName = value;

Where DataType is such as int, string, byte, float etc.

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

Ans. The eight primitives defined in Java are int, byte, short, long, float, double, boolean and char. Primitive data types are a set of basic data types from which all other data types are constructed.

Que. 5. What are the Identifiers in Java?

Ans. An Identifiers is a name given to a package, class, interface, method or variable. All identifiers must have different names.

Que. 6. List the Operators in Java?

Ans.

1. Arithmetic Operators
2. Unary Operators
3. Assignment Operator
4. Relational Operators
5. Logical Operators
6. Ternary Operator
7. Bitwise Operators
8. Shift Operators
9. instance of operator

Que. 7. Explain about Increment and Decrement operators and give an example.

Ans. **Increment operator** is used to increment a value by 1. There are two varieties of increment operator:

- **Post-Increment:** Value is first used for computing the result and then incremented.
- **Pre-Increment:** Value is incremented first and then the result is computed.

Ex. **1. Post-Increment Operator**

```
int a = 5;
int b = 7;
int c = a++ + b;
```

2. Pre-Increment Operator

```
int A = 5;
int B = 7;
int C = ++A + B;
```

Decrement operator is used for decrementing the value by 1. There are two varieties of decrement operators.

- **Post-decrement:** Value is first used for computing the result and then decremented.
- **Pre-decrement:** Value is decremented first and then the result is computed.

Ex. 1. Post-Decrement Operator

```
int a = 5;
int b = 7;
int c = a-- + b;
```

2. Pre-Decrement Operator

```
int A = 5;
int B = 7;
int C = --A + B;
```