Java Variables and Data type

Assignment Questions-5

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. In most

of these languages, types must be expressly indicated by the programmer; in other cases (such as OCaml), type inference

allows the programmer to not indicate their variable types.

A 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. **Example JavaScript**, **Python**, **Ruby**, **PHP**, **Lua and Per**.

2. What is the variable in Java?

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

data type. Variable is a name of memory location. There are three types of variables in java: local, instance and

static.

3. How to Assign a value to variable?

Ans: Type variable_Name = value; Where type is one of Java's types (such as int or String), and variable_Name is the

name of the variable (such as x or name). The equal sign is used to assign values to the variable.

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 - includes byte, short, int, long, float, double, boolean and char.

5. What are the Identifiers in Java?

Ans: All Java variables must be identified with unique names. These unique names are called identifiers. Identifiers

can be short names (like x and y) or more descriptive names (age, sum, totalVolume).

6. List the operators in Java?

Ans: Java supports the following types of operators:

- Arithmetic Operators
- Assignment Operators
- <u>Logical Operators</u>
- Relational Operators
- Unary Operators
- <u>Bitwise Operators</u>
- Ternary Operators
- Shift Operators

7. Explain about Increment and Decrements operators and give an example?

Ans: Increment Operator is used to increase the value of the operand by 1 whereas the Decrement Operator is used to

decrease the value of the operand by 1. In Java, the value of the variable is increased or decreased by 1 with the

help of the Increment operator and the Decrement Operator.

- 1.) Post-Increment (i++): we use i++ in our statement if we want to use the current value, and then we want to increment the value of i by 1.
- 2) Pre-Increment(++i): We use ++i in our statement if we want to increment the value of i by 1 and then use it in our statement.