

Fundamentals of Java

Assignment

Part – 2

1. What is a Statically typed and dynamically typed programming language?

Ans:

Statically Typed Programming Language is the type of programming language in which the type of data or data type will be initialized and declared at beginning and before the use of it in program at the compile time.

Examples – C, C++, Java, etc.

Dynamically Typed Programming Language - is the type of programming language in which the type of data or data type will be initialized and declared while using at runtime.

Example- Python, JavaScript, etc.

2. What is the Variable in Java?

Ans: Variables in Java are like a container in which the data or values are stored or reserved in that place in the computer system.

Syntax:

```
Type_of_data Variable_name = value;
```

3. How to Assign a Value to a Variable?

Ans: To assign a value to a variable, we follow the following syntax:

```
Data_type Variable_name = value;
```

We can initialize the variable by specifying an equal sign or assignment operator and a value.

Also, sometimes we initialize the variable at first and declare it after the next instruction. The compiler never assigns a value to an uninitialized variable by default in java.

Example: `int number =45;`

Here, number is an integer type variable which stores the value 45.

4. What are Primitive Data types in java?

Ans: Primitive Data Types are the predefined data types, used in java which specifies the type of data have standard values and sizes.

There are 8 primitive data types in java, which are as:

- Byte
- Short
- Int
- Long
- Float
- Double
- Char

- Boolean

5. What are the Identifiers in java?

Ans: Identifiers are the names which are given to an entity for the identification purposes. In Java, an identifier can be a class name, method name, label, package name etc.

6. List the Operators in java?

Ans: Operators in Java:

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

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

Ans: Increment Operator: Increment operator is an operator which is used to increment the value by 1. There two types of increment operators:

- Post Increment operator: In Post Increment operator, the operator first assigns the values and then increments it by 1.
Syntax: **a++;**
- Pre-Increment operator: In Pre-Increment operator, the operator first increments the value by 1 and then assigns the value to the variable.
Syntax: **++a;**

Decrement Operator: Decrement operator is an operator which is used to decrement the value by 1. There two types of decrement operators:

- Post Decrement operator: In Post Decrement operator, the operator first assigns the values and then decrements it by 1.
Syntax: **a--;**
- Pre-decrement operator: In Pre-decrement operator, the operator first decrements the value by 1 and then assigns the value to the variable.
Syntax: **--a;**