

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".

Ec: 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".

Ec: 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.

3. How To Assign a Value To Variable?

Ans: Syntax for Declaring a Variable is as follows:

Type variable_name [= value];

The variable_name is the name of a variable. We can initialize 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. Variables can be declared and assigned separately.

4. What are Primitive Data types in Java?

Ans: A primitive type is predefined by the language and is named by a reserved keyword. The primitive data types in Java include boolean, char, byte, short, int, long, float, and double.

Examples: Boolean flag=true; , byte range=105; , short loss=-50; , int profit=5000; , long profit=455559990; , double height=12.5; , float depth=-32.3f; , char temp='a'; ,

5. What are the Identifiers in Java?

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

Examples of legal identifiers: rank, \$name, _rate, __2_mark

Examples of illegal identifiers: 102pqr, name.

6. List the Operators in Java?

Ans: Operators in Java can be classified into 6 types:

1) Arithmetic Operators: + Addition, - Subtraction, * Multiplication, / Division, % Modulus, ++Increment, --Decrement

2) Relational Operators: > Greater Than, < Less Than, == is Equal to

3) Logical Operators: && Logical And, || Logical Or, ^ Logical XOR, ! Logical Not

4) Assignment Operators: = Assign right-hand side value to the left

5) Unary Operators: ++ Increment, -- Decrement

6) Bitwise Operators: Bitwise OR (|), Bitwise AND (&), Bitwise XOR (^), Bitwise Complement (~).

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

Ans: Increment(++) increases the value of the operand by 1.

Decrement(--) decreases the value of the operand by 1.

There are 4 ways in which these operators can be used:

1. Pre Increment(++a):

Example: a=20; // Here a is 20

b=++a; // **Here a is first incremented by 1 to 21 and then assigned to b, a=21, b=21**

System.out.println(b); // This will print 21

2. Post Increment(a++):

Example: a=20; // Here a is 20

b=a++; // **Here b is assigned the value of a first and then a is incremented by 1, b=20 then a=21**

System.out.println(b); // This will print 20

3. Pre Decrement(--a):

Example: a=20; // Here a is 20

b=--a; // **Here a is first decremented by 1 to 19 and then assigned to b, a=19, b=19**

System.out.println(b); // This will print 19

4. Post Decrement(a--):

Example: a=20; // Here a is 20

b=a--; // **Here b is assigned the value of a first and then a is decremented by 1, b=20 and then a=19**

System.out.println(b); // This will print 20