

Day - 7

Q.1 what is statically and Dynamically typed programming language?

statically typed

Ans. If the memory of the variable is given during the compilation time itself then such type of programming languages are called as "statically type".

Ex. C, C++, Java

Dynamically typed

Ans. If the memory of the variable is given during execution time itself then such type of programming languages are called as "statically typed".

Ex. Python, PHP, JavaScript.

Q.2 what is variable?

- A variable is the little of a reserved region allocated in a memory. In other words, it may be referred to as the name of 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.

Ques - How assign variable in java?

Data 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.

`int age = 20;` ← Value.
↓
data type Variable-name

∴ Variable can be declared and assigned separately

`int rate;`
`rate = 40;`

∴ And we ^{can} also change the value of variables

`int rate = 50;`
`System.out.println(rate) // 50`
`rate = 60;`
`System.out.println(rate) // 60`

Naming convention for variables in java:

1. variable name should not begin with a number.

ex. `int 2Var` (Invalid)

2. White spaces are not permitted in variable name.

ex. `int cricket score` (Invalid)

3. A java keyword (reserved word) cannot be used as a variable name.

ex. `String float = 10` (Invalid)

As per the latest coding practices, for variable names with more than one word the first word has all lowercase letters and the first letter of subsequent are capitalised

Ex. cricketScore.

- while creating variable it's preferable to give them meaningful name like - 'age', 'earning', 'value'

• we use all lowercase letters when creating a one word variable name.

Ex. physics

Q.4 what are primitive data type in java?

Data type specifies the different size and value that can be stored in the variable

Based on a datatype of a variable the operating system allocates memory and decide what can be stored in the reserved memory.

There are two types of data types in java.

1. primitive data types - primitive data types include boolean, char, byte, short, int, long, float and double

Question-5 what are identifiers in java

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

there are few points remember while dealing with identifiers

- All identifiers should begin with a letter (A to Z or a to z), \$ and - and must be unique.
- A keyword can not be used as an identifier.
- The identifiers are case sensitive.
- whitespaces are not permitted.

Ex. \$name -rate --2 -- marks (valid)
102name -rate- (invalid)

Ques 5 List the operators in java?

operator in java can be classified into 6 types

1. Arithmetic operators.
2. Relational operators.
3. Logical operators.
4. Assignment operators.
5. unary operators.
6. Bitwise operators.

Ques 6 Explain about increment and Decrement operators and give an example?

Ans. Increment operator

++ Increment the value of operandnd by 1

ex. `int a = 35;`

`a = a++`

output = 36

-- Decrement operator

Decrease the value of operand by 1

ex. `int b = 35`

`b = b--`

output = 34