

Java Variable and Data types

Q1-What is statically type and Dynamically typed programming language?

Ans- Dynamically typed language performs type checking at runtime .

Ex:- Java is a dynamically type language

```
Int number; number=10;
```

While Statically type performs type checking at compile time.

Ex:- Python is a statically type language. number=10;

Q2-What is variable in java?

Ans-A variable in java a data container that store the data values during java program execution.

There are types of variables in java.

1.Instance variable

2.Local Variable

3.Static variable

Q3-How to assign a value to variable?

Ans-First create a variable name of type(datatype), and assign it the value whose type we want.

Ex- `int number=10;`

Here, int is a data type and number is a variable of int data type and 10 is the value who is assigned in the number variable.

Q4- What are primitive Data types in Java?

Ans-There are 8 primitive data types-

1). Byte 2). Short 3). int 4). long

5). float 6). double 7). Boolean 8). char.

Q5-What are the identifiers in Java?

Ans-Identifiers in java are symbolic names used for identification.They can be class name ,variable name, method name ,package name etc.

There are some rules for creating identifiers.

1. A valid identifier must have characters [A-Z] or [a-z] or numbers [0-9], and underscore(_) or a dollar sign (\$).

for example, **@javatpoint** is not a valid identifier because it contains a special character which is @

2. There should not be any space in an identifier.

Example- java **tpoint** is an invalid identifier.

3. An identifier should not contain a number at the start.

Example- **123javatpoint** is an invalid identifier.

Q6-List the operator in Java?

Ans-These are some operators in java-

- | | |
|-------------------------|-------------------------|
| 1.) Arithmetic Operator | 2.) Assignment Operator |
| 3.) Logical Operator | 4.) Relational Operator |
| 5.) Unary Operator | 6.) Ternary Operator |
| 7.) Bitwise Operator | 8.) Shift Operator |

Q7-Explain about Increment and Decrement operator and given an example.

Ans-The operator (++) and the operator (--) are Java's increment and decrement operators. The increment (++) and decrement operator (--) are simply used to increase and decrease the value by one.

There are two types of increment and decrement.

- 1.) Pre-Increment and Pre-Decrement.
- 2.) Post-Increment and Post-Decrement.

Example:-

```
package hello; class increment { int temp1, temp2,
number; int temp3, temp4; public void
result_increment(int number) { this.number = number;
temp1 = ++number; temp2 = number++;
    System.out.println("after pre-increment=" + temp1);
    System.out.println("after post-increment=" + temp1);
    System.out.println("after pre-increment=" + number);
}
    public void result_decrement(int number) {
        this.number = number; temp3 = --
        number; temp4 = number--;
```

```
        System.out.println("after post-decrement=" + temp3);

        System.out.println("after post-decrement=" + temp4);

        System.out.println("after post-decrement=" + number);
    }
}

public class test { public static void main(String[]
    args) { increment i = new increment();

        i.result_increment(7);

        i.result_decrement(7);

    }
}
```