

Java Variable and Data types

Question 1: -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;
```

Question 2: -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

Question 3: -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.

Question 4: -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. |

Question 5: -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.
For example, java **tpoint** is an invalid identifier.

3.An identifier should not contain a number at the start.
For example, **123javatpoint** is an invalid identifier.

Question 6: -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 |

Question 7: -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);  
    }  
}
```