# Java With DSA And System Design

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**Assignment : Day 7**

**Assignment Questions**
1. **What is statically typed and Dynamically typed programming languages?**
2. **What is the variable in Java?**
3. **How to assign a value to a variable?**
4. **What are primitive data types in Java?**
5. **What are the identifiers in Java?**
6. **List the operators in Java?**
7. **Explain about Increment and Decrement operatoes and give examples?**

**Answers**
1. **What is statically typed and Dynamically typed programming languages?**

**Statically Typed Programming Language:**
It is a programming language in which the variables need to be mentioned it's type before it's compilation.The memory of the variable will be given during compilation itself.
Examples: C, C++

**Dynamically Typed Programming Language:**
It is a programming language in which the variables need not to be mentioned it's type before it's compilation.he memory of the variable will be given during execution time.
Examples: Python and Javascript

2. **What is the variable in Java?**

A variable is a name to a storage location in the memory. A variable will be used to store the data. The size of the memory which variable is pointing depends on the type of its datatype.
Syntax for declaring a variable in Java:
Type variable_name = value;

3. **How to assign a value to a variable?**

The value to a variable can be assigned using the "equal to" operator.
Example:
Variable_type variable_name = value;
int Age = 23;

4. **What are primitive data types in Java?**

A primitive type is predefined by the language and it is named by a reserved keyword. Generally integer, float, character and boolean are termed as the primitive data types.

5. **What are the identifiers in Java?**

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

6. **List the operators in Java?**
- Arithmetic Operators
- Relational Operators
- Logical Operators
- Assignment Operators

- Unary Operators
- Bitwise Operators

**7. Explain about Increment and Decrement operatoes and give examples?**

**Increment Operator:**

This operator is used to increase the value of the variable.

Example:

int a = 10;

a++;

Now the value of a will increase by 1.

It has two types called pre- increment and post- increment operators.

++ var is used as pre increment and the value will be incremented first and then it will be assigned.

var ++is used as post increment and the value will be incremented after the value will be assigned.

**Decrement Operator:**

This operator is used to decrease the value of the variable.

Example:

int a = 10;

a–;

Now the value of a will decrease by 1.

It has two types called pre- decrement and post- decrement operators.

- -  var is used as pre decrement and the value will be decremented first and then it will be assigned.

var - - is used as post decrement and the value will be decremented after the value will be assigned.