

# Java Variables and Data types

## Assignment Questions



1. What is statically typed and Dynamically typed Programming Language?
2. What is the variable in Java?
3. How To Assign a Value To 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 operators and give an examples

**Note:-**Please create a Google Document and write your answers and upload the shareable link of the Google Document with view access during the submission of the assignment.

## Answers:

1. Allocation of memory for declared variable happens at compilation time called statically typed.  
Allocation of memory for declared variable happens at runtime time called dynamically typed.
2. Variable is a container used to store the data.
3. Using the assignment operator we assign values to the variable  
Syntax:  
`type variable-name = value;`  
  
Example: `int a = 10;`
4. Primitive data types are predefined in java such as **byte, int, short, float, double, and char.**
5. Unique names were given to the variable. Those unique names are called identifiers.
6. **Operators** in java are
  - a. Assignment operator. (=)
  - b. Arithmetic operators. (+, -, \*, /, %)
  - c. Bitwise operators. (&, |, ^, ~)
  - d. Conditional operator. (if)
  - e. Logical operators. (AND, OR, NOT)
  - f. Relational operators. (<, >, <=, >=,)
  - g. Increment and Decrement operator.
  - h. Ternary operator.

## 7. Increment operator:

Used to increase the value of the variable by 1.

### a. Pre-Increment:

```
int var1 = 10;  
++var1    // var1 = 11
```

### b. Post-Increment:

```
int var2 = 5;  
var1++    // var2 = 6
```

## Decrement operator:

Used to decrease the value of the variable by 1.

### a. Pre-Decrement:

```
int var1 = 5;  
--var1    //var1 = 4
```

### b. Post-Decrement:

```
Int var2 =10;  
var2--    //var2 = 9
```