

Q.1)

Statically Type

1) We have to mention the datatype for variable.

Eg: - `int a=16;`

`String name="Vamshi";`

2) The errors are found before the compilation.

3) Eg: - C, C++, Java.

Dynamically Type

1) We don't have to mention the datatype to the variable.

`a=16`

`name="Vamshi"`

2) The errors are found after the compilation.

3) Eg: - Python

Q.2) Variable

It is the name of the memory allocation which stores the value.

Eg: - `char star='*';`

Here star is the variable_name which stores * as value in memory location. And char is the datatype.

Q.3) Well to assign a value to the variable we use =.

i.e. `Datatype variable_name= value;`

To store Alphabets or sentences we use parenthesis then we write the value inside them.

Q.4) Primitive Datatypes

These are the datatype which store only a single value within a variable.

Eg: - byte, int, long, float-decimal values, double-large decimal values

Q.5) Identifiers

These are the names that given to a class, packages, variables to store value.

Well Java is Case sensitive. These are symbols we use to write the identifiers A to Z, a to z, _&\$.

Class StudentDetails → PascalCase

{

`String firstName='Vamshi';` → CamelCase

`int RollNo=11;` → PascalCase

}

Here StudentDetails, firstName, RollNo all these are identifiers.

Q.6)

Operators in Java:

- a) Arithmetic operators
- b) logical operators
- c) bitwise operators
- d) Relational operators
- e) Assignment operators
- f) Unary operators

Q.7) Increment and decrement operators

These operators increase value by 1 until it not shown

In increment operators there are two types:

- a) Post increment (Variable_Name++)

```
import java.util.*;
//Here it is saying first assign then increment the values
public class IncrementTypes {
    public static void main(String[] args) {
        int a=5;
        int b=a++;
        System.out.println(a);//6
        System.out.println(b);//5
    }
}
```

- b) Pre increment (++Varibale_Name)

```
import java.util.*;
//Here it is saying first increment then assign the values
public class decrementTypes {
    public static void main(String[] args) {
        int a=5;
        int b=++a;
        System.out.println(a);//6
    }
}
```

```
        System.out.println(b);//6
    }
}
```

In decrement operators there are two types:

- a) Post decrement(Variable_Name--)
import java.util.*;
//Here it is saying first assign then decrement the values
public class IncrementTypes {
 public static void main(String[] args) {
 int a=5;
 int b=a--;
 System.out.println(a);//4
 System.out.println(b);//5
 }
}
- b) Pre decrement(--Variable_Name)
import java.util.*;
//Here it is saying first decrement then assign the values
public class decrementTypes {
 public static void main(String[] args) {
 int a=5;
 int b=--a;
 System.out.println(a);//4
 System.out.println(b);//4
 }
}