

FUNDAMENTALS OF JAVA ASSIGNMENT

Q.1 What is a statically and dynamically typed programming language?

Ans. Statically typed programming languages are the languages in which we define the datatype before the compilation of the program.

Ex. C, C++, JAVA

Dynamically typed programming languages are the languages in which the data type is determined at the execution time.

Ex. Python, Javascript

Q.2 What is the variable in Java?

Ans. Variable is the container which is used to store the values in java.

Ex. `int a=5;`

Here,

`int`=datatype

`a`=variable

`5`=value

There are certain rules to define a variable:-

- It should not start with numbers.
- Only `_` and `$` are allowed as the special symbol.
- A variable name can start with these special symbol.
- A variable name can't be a keyword.

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

Ans. `int a=5;`

`String name="Pumori";`

`boolean value=true;`

Q.4 What are the primitive data types in Java?

Ans. A primitive data type is predefined by the language.

Ex. `short`, `int`, `long`, `float`, `double`, `boolean`

`short a=5;`

`int b=10;`

`long c=20;`

`float d=1.5f;`

`double e=20.5;`

```
boolean f =true;
```

Q.5 What are identifiers in Java?

Ans. Identifiers are the name given to class, variable, method, package ,etc.

There are certain conventions :-

- class name should start with a uppercase letter
- variable name should start with a lowercase letter
- method name should start with a lowercase letter

Q.6 List the operators in Java?

Ans. There are 6 types of operators:-

- Arithmetic operators
- Relational operators
- Logical operators
- Assignment operators
- Unary operators
- Bitwise operators

Q.7 Explain about increment and decrement operators and give an example.

Ans. Increment operator is used to increase the value by one.

There are two increment operators pre-increment and post-increment.

a++ → postIncrement

++a → preIncrement

Decrement operator is used to decrement the value by one.

There are two decrement operators pre-decrement and post-decrement.

a- → post decrement

-a → pre decrement

Ex.

```
a=4;
```

```
b=a++
```

Value of a is 5

Value of b is 4

a=4

b=++a

Value of a is 5

Value of b is 5

a=4

b=a--

Value of a is 3

Value of b is 4

a=4

b=--a

Value of a is 3

Value of b is 3