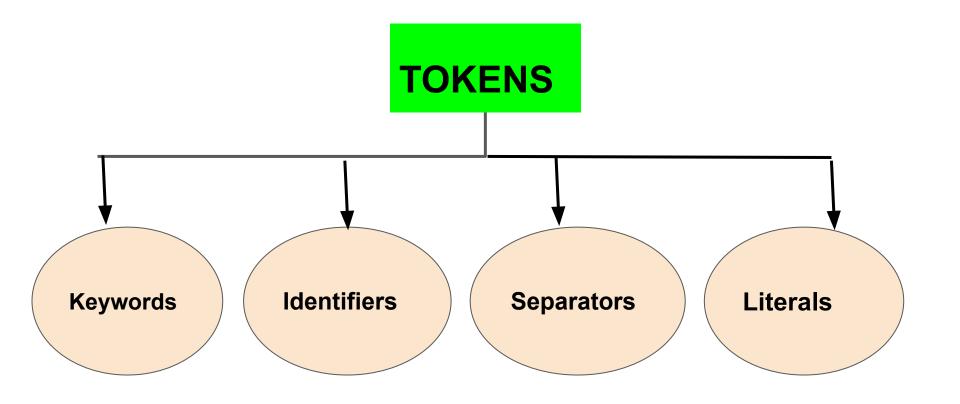
TOKENS

- ☐ Token is defined as each individual component of Java program that carries some meaning and takes active part in program execution.
- ☐ The smallest unit of programming language which is used to compose instructions
- ☐ Token is a set of valid characters used for writing a statement in Java program.



KEYWORDS

- A predefined word which the java compiler can understand is known as a keyword.
- Keywords are reserved words which are preserved by system.
- Every keyword in java is associated with a specific task.
- A programmer can't change the meaning of a keyword (can't modify the associated task).
- Keywords are always written in lowercase.

EXAMPLE:

We have 50+ keywords in java,

class, public, static, void, etc.,

IDENTIFIERS:

• The name given to the components of java by the programmer is known as identifiers.

LIST OF COMPONENTS:

- class
- method
- variables
- interface
- Object, etc

A programmer should follow the rules and conventions for an identifier.

RULES OF AN IDENTIFIERS:

- Identifiers should never start with a number.
- Identifiers should not have special characters except _ and \$.
- Character space is not allowed in identifiers.
- We can't use keyword as an identifier.

CONVENTIONS:

The coding or industrial standards to be followed by the programmer are known as conventions.

- Compiler doesn't validate the convention, Therefore if conventions are not followed then we won't get a compile-time error.
- It is highly recommended to follow the convention.

CONVENTION FOR CLASS NAME AND INTERFACE:

Single word - The first character should be in upper case remaining in lower case.

Example: Addition, Calculator, Sum, etc...

★ Multi-word – The first character of every word should be in upper case remaining in lower case.

Example: SquareRoot, PowerOfDigit, FactorialOfDigits, etc...

CONVENTION FOR METHODS AND VARIABLES:

Single word - It should be in lowercase(all characters).

Example: add, choice, product, etc...

★ Multi-word – The first word should be in lowercase remaining words should start with an uppercase.

Example: squareRoot , powerOfDigit , factorialOfDigits , etc...

SEPARATORS

- They are special characters in Java.
- They are used to separate the variables or the characters.

```
E.g.:-
Comma(,)
Brackets()
Curly brackets{}
Square brackets[]
Semi colon(;)
```

LITERALS:

- The values or data used in a java program is known as literals.
- They are remain unchanged during entire execution of the program

The data is generally categorized into two types

- 1. Primitive values-> Single values data are called primitive values.
- **2. Non-primitive values->**The multi-valued data is known as non-primitive value (group of data).

PRIMITIVE VALUES:

NUMBER LITERALS:

• Integer number literals-> The whole numbers(positive or negative) are known as integer literals.

Example: 1, 4, 67, 24, 35, etc...

Floating number literals->They are the fractional numbers.

Example: 2.3, 1.0, 35.5634, 23.53, etc...

CHARACTER LITERALS:

- A single letter, digit or any special symbol which is enclosed within a single quote ('') is considered as a character literal.
- The length of the character literals should be one.

EXAMPLE:

'a', 'G'. '1', '\$', etc...

BOOLEAN LITERALS:

- ★ Boolean literals are used to write logical values.
- ★ We have two Boolean literals
 - true
 - false

NON PRIMITIVE VALUES:

STRING LITERALS:

- Anything enclosed within a double quote (" ") is known as String literals. The length of the string literals can be anything.
- They are case-sensitive.

EXAMPLE: "hello", "true", "a", "123", "hello@", "1.1", etc...

Note:- A string literal can be a set of any type of characters within a limit of 256 characters.