Basic information

Tokens:-

They are the smallest unit of a program, In tokens we have

* Identifiers
* Keywords
* Operators
* Separators
* Literals
* Comments

Identifiers: - they are the name given to a java program, they cannot be keywords.

Keywords: - they are the pre-defined words which have it’s own meaning in java, identifiers cannot be keywords.

There are 50 keywords

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Abstract | Assert | Boolean | Break | Byte | Case |
| Catch | Char | Class | Const\* | Continue | Default |
| Do | Double | Else | Enum\*\*\*\* | Extends | Final |
| Finally | Float | For | Goto\* | If | Implements |
| Import | Instances | Int | Interface | Long | Native |
| New | Package | Private | Public | Protected | Return |
| Short | Static | Stricfp\*\* | Super | Switch | Synchronize |
| This | Throw | Throws | Transient | Try | Void |
| Volatile | while | ----------- | ------------ | --------------- | ------------- |

Operators: - operator is a symbol that is used to perform some operation on the operand.

Example: 10+20 + is an operator, and the number are the operand

|  |  |  |
| --- | --- | --- |
| Operator type | Category | Info |
| Unary | Postfix  Prefix | Expr++ expr—  ++expr –expr !~ |
| Arithmetic | multiplication,division, subtraction, addition | + - \* / % |
| Shift | Shift | << >> |
| Relational | Compare and equal | <, >, <=, >=, == , != |
| Bitwise | AND  EXCLUSIVE OR  INEXCLUSIVE OR | &  ^  | |
| Logical | Logical AND  Logical OR | &&  || |
| Ternary | Ternary | ?: |
| Assignment | Assignment | = + - \* / % & ^ < > <= >= == != |

Separators: - they are used to separate the given code, we have

{ } – braces

[ ] – brackets

( ) – parentheses

; - semicolon

, comma

Literals: - they are the values that is used to perform some operations, in literals we have

Number literals

* Integer = 1, 2,3 ….
* Decimal = 1.5,2.6,0.5

String literals = “hello” “java”

Character literal = ‘A’ ‘a’ ‘$’

Boolean literal

* True
* False

Comments: - they are the additional information given to a program, in comments we have

* Block comments
* Multi line comments

What is JAVA?

Java is an object oriented programming language which is used to develop a software, in java we have

* Class
* Enum
* Annotation
* Interface

What is class?

Class is blue print or a template to create an object

Syntax

Class <class\_name> class declaration

{

Public static void main (String args[]) main method declaration

{

Class body declaration

// main method body

}

}

1. Program to print literals

Class literals

{

Public static void main(String args[])

{

System.out.println(“string”);

System.out.println(a);

System.out.println(1);

}

}

1. Program to perform basic operator

Class operators

{

Public static void main(String args[])

{

System.out.println(“addition of ” 10+10);

System.out.println(“subtraction of ” 10-10”);

System.out.println(“multiplication of ” 10\*10”);

System.out.println(“diviser of ” 10/10”); //will give the quotient

System.out.println(“modules of ” 10%10”); //will give the remainder

}

}