**Basic Java Syntax**

* When we consider a Java program, it can be defined as a collection of objects that communicate via invoking each other's methods.
* Object − Objects have states and behaviors.
  + Example: A dog has states - color, name, breed as well as behavior such as wagging their tail, barking, eating.
  + An object is an instance of a class.
* Class − A class can be defined as a template/blueprint that describes the behavior/state that the object of its type supports.
* Methods − A method is basically a behavior.
  + A class can contain many methods.
  + It is in methods where the logics are written, data is manipulated and all the actions are executed.
* Instance Variables − Each object has its unique set of instance variables.
  + An object's state is created by the values assigned to these instance variables.

**Basic Syntax**

* Java is case sensitive
* Class names should always start with a capital and have capitals for the words in its name
  + Example: *class MyFirstJavaClass*
* The name of the program file needs to exactly match the class name (Java is also case sensitive)
  + EX: Assume *'MyFirstJavaProgram'* is the class name. Then the file should be saved as *'MyFirstJavaProgram.java'*
* Method names should start with lower case letters, with upper case being used for words coming after the first
  + Example: *public void myMethodName()*
* *public static void main(String args[])* − Java program processing starts from the main() method which is a mandatory part of every Java program.

**Java Identifiers**

* Names used for classes, variables, and methods are called identifiers.
  + All identifiers should begin with a letter (A to Z or a to z), currency character ($) or an underscore (\_).

**Java 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 | instanceof | int | interface |
| long | native | new | package |
| private | protected | public | return |
| short | static | strictfp | super |
| switch | synchronized | this | throw |
| throws | transient | try | void |

**Comments in Java**

public class MyFirstJavaProgram {

/\* This is my first java program.

\* This will print 'Hello World' as the output

\* This is an example of multi-line comments.

\*/

public static void main(String []args) {

// This is an example of single line comment

/\* This is also an example of single line comment. \*/

System.out.println("Hello World");

}

}