* Java
  + By James gosling
  + In 1995
  + Oak 🡪 java

Editions :

🡺SE - Standard Edition

]🡺ME- Micro Edition

🡺EE - Enterprise Edition

Application:

🡺stand alone

🡺web application/shared application

* Platform independency🡺java
* Dependent🡪JRE
* Methods:
  + named block of codes
  + used to reduce the complexity of the code
* WORA= wirte once run anywhere

|  |  |  |
| --- | --- | --- |
| source file🡪containing source code,save it with extnsns ‘.java’ | JavaC-to compile  Checks for rules,syntactical errors eg:javac src.java  🡪converted into .class | .class o/p  Javasrc(0 |
| ---------------------------🡪inp |  |  |
|  |  |  |
|  |  |  |

Jvm and jre uses .class files

Programs are of two types1🡪class -

🡪interface

***OBJECTS***:

* Objects are elements of a program that has some data which is also known as state.
* Objects also have behaviours which means they can perform some operations.
* Those behaviours in java are the methods.
* Java is an object oriented programming language.

***Keyword :***

* ***That have predefined meaning before the usage.***
* ***It has 50 keywords/53(we take 3-literals as keywords).***
* ***True,false🡪actually called a literals, but called as keywords coz those have pre-defined meaning.***

JAVA is case sensitive:

* Public!= public

***IDENTIFIERS:***

* ***Used to identify using the name. (or) a name given to a class***

***Rules to follow while creating an identifier:***

* + ***It should always start from an alphabet or***

***a letter.***

* + ***“:It cannot start from the digit and can have any no. of digits after having a character..***
  + ***Identifiers are also case sensitive.***
  + ***You cannot give any keyword as an identifiers***
  + ***“\_” , “$” can be only the special characters that can be used.***
  + ***We can start with a letter and later numbers***
  + ***If we declare the class as public then we should give the same class name as the source file name***
  + ***Identifiers are names given to components or elements of a program***

***VARIABLES:***

* ***Variable is just a piece of emory***
* ***Every variable must havea datatype***

***DATA TYPE:***

***Java: we can d7***

***Primitive type:   
1.BYTE:()-it can contain***

***Reference type: if the user id***

***2.Short:-( (-32768 to 32767)***

* ***It bytes or 16bits;***

***3.INT;- (32 bits)***

***Somewhere upto 2 million***

***4.Long:- (64bits)***

***Somewhere upto 9 billions***

***5.Double:-***

***(8bytes/64bits)***

***Stores decimal values***

***6.Float:-***

***(32bits/4bytes)***

***Stores decimal values***

***7.CHAR:- character***

* ***Stores only one character***
* ***Have to be given in single inverted commas🡪 ‘s’***

***8.BOOLEAN:-***

* ***Accept either true-1 or false-0***
* ***Size is not been defined***
* ***0,1 are one bits***