Java

Initially it is developed by Sun Microsystems but later it is acquired by Oracle.

* It’s is computer programming language and an open source technology.
* It is platform independent i.e OS independent.

Eclipse

* Eclipse is an editor tool.
* It is very user friendly.
* It is also called IDE(Integrated Development Environment)
* The name of a project in Eclipse must be in Camel Case(JavaTrainingSession)

Installation of Java & Eclipse

Creation Of Project in eclipse

* Go to File -> New -> Java Project
* The name of the project must be Camel Case(JavaTrainingSession)
* Once the project is created we observe that JRE System Library is associated automatically i.e Java Runtime 1.7 version is already associated with the project when we install JRE. Eclipse will automatically fetch all the libraries and associate them with the project.

Package:

Generally the code is divided into different modules. To manage all this we create a package in which all the classes and files are maintained.

Class:

To execute the java program please ensure that main method is available or not, without main method java will not be able to execute the program.

Whenever we create a java file or a class the extension will be .java

Comments:

Comments are nothing but the documentation. It is good practice to give the comments. There are two types of comments. They are :

* Single line comment which starts with ‘//’
* Multiple lines comment starts with ‘/\*’ and ends with ‘\*/’

Data Types:

1. int is a datatype which stores integer values.

Once we declare any variable in java memory it allocates some space for that variable. In java duplicate variables cannot be defined.i.e you can’t declare and initialize the same variable two times in java.

Eg : int i =10;

int i =20;

This is not acceptable in java, you cannot assign two different values to the same variable at a time.

int i=10;

i = 20;

This is acceptable. It states that the initially the value of i is 10 and it is changed to 20.

* In java each and every statement must end with semi-colon (;).

1. double:

double datatype will store the decimal values. It also stores integers as decimal points.

We can store integers into double but vice versa is not possible.

1. char:

char datatype will store either special characters or numeric characters or alphabet.

* The character should always be written in single quote. E.g: char c = ‘a’
* char c1 = ’1’ 🡪 here 1 is not an integer. As it is mentioned in single quotes it is considered as character.
* char should be a single digit value. Eg : char c2 = ‘aa’ this is not allowed.