**Difference between print() and println()**

**#. ln is the difference.**

**#. println() method places the cursor in the next line after printing the current output.**

**#. print() method places the cursor in the same line after printing the current output.**

**so that the coming output will be printed in the same line.**

**Naming Convention:-**

**#. package name should be start with lowercase .it is not mandatory but recommended.**

**#. class,Interface,Enum should start with Uppercase. it is not mandatory but recommended.**

**#. variable name should start with lowercase. it is not mandatory but recommended.**

**#. method name should start with lowercase.It is not mandatory but recommended.**

**#. Variable,Method usese Camel Case where Compound word or phrase is written without Spaces.**

**Example:- userName, displayNumber(),**

**#. For Class Name : Example :- JavaExample**

**Comments:-**

**#. Comment is a description about the programming elements.**

**#. Comments are meant for automation test Engineer to understand the purpose of code.**

**Types of Comment:-**

**1. Single Line Comment:- //**

**2. Multiline Comment :- /\* code \*/**

**3. Document Comment :- /\*\*\*\*\*\*/**

**Note:-**

**#. The Statements palced inside the comments section are ignored by the javac compiler while compiling the class.**

**#. It mean compiler will not generate the bytecode for those comments.so, comments will not be present inside the class.**

**Identifiers and Its Rules:-**

**#. Identifiers is a name of basic programming elements.**

**Rules to define Identifiers:-**

**#. Identifiers should only contain alphabets, digit, special character.**

**#. alphabets :- [a-z] [A-Z]**

**#. digits:- [0-9]**

**#. Special Character :- [ \_ or $ ]**

**#. Identifiers should not start with a digit.A digit can be used from second character onwards.**

**#. Identifiers should not contain space in the middle of the words.If we want to provide gap between words,**

**then word must be connected with underscore(\_). Due to this reason Underscore( \_) is called as connector symbol.**

**#. Identifiers is case senitive ( a != A)**

**Java Keywords and Its Rule:-**

**#. Keywords is predefined identifiers available directly throughout the JVM.**

**#. The keywords will have special meaning in Java.**

**#. Keywords are reserved for their intended use.**

**#. All character in keyword must be in lower case because keyword is case sensitive.**

**#. Basically, keywords are used to communicate with compiler and JVM about the operation we are performing in the software application.**

**#. In Java we have 50 Keywords.**

**Java Keywords:-**

**#. Java Files :- class,interface,enum (3)**

**#. Primitive DataTypes :- byte,short,int,long,double,float,char,boolean (8)**

**#. Return Type :- void (1)**

**#. Memory Location :- static,new (2)**

**#. Control Statement :- if, else, switch ,case, default, for,while,do,break,contiue,return (11)**

**#. Accessiblity Modifier :- public , private,protected(3)**

**#. Modifiers :- static,final,abstract,native,transient,volatile,synchronized,strictfp (8)**

**#. Inheritance:- extends, implements (2)**

**#. Object Representation:- this,super, instanceof (3)**

**#. Package:- package,import (2)**

**#. Exception Handling:- try,catch,finally, throw,throws (5)**

**#. Verification Point :- assert (1)**

**#. Unused Keywords:- const,goto (2)**

**DataTypes and Variables:-**

**#. Datatypes are declaration for variables.This determines the type and size of data associated with variable which is essential to know since different data types occupy different size of memory.**

**There are 2 Types of Data types:-**

**1. Primitive Datatype :- Used to store single value at a time.**

**Primitive Datatypes:- int,float,char,long,byte,short,double,boolean**

**Need of Data Types:-**

**#. Datatypes are used to store data temporarily in computer through program.**

**#. Data Types is something which gives information about the size of memory location.**

**Variables:-**

**#. A Variable is a container (Storage Area) ued to hold data.**

**#. Each Variable should be given a unique name ( identifier)**

**Create a Variable:-**

**#. Syntax:- dataType variableName = variableValue;**

**Example:- int a=10;**

**float b=9.9f;**

**Types of Variables:-**

**1. Local Variable**

**2. Global Variable**

**3. Static Variable.**

**1. Local Variable:- A Variable declared inside method body,will be known as local variable.A local variable cannot be static.**

**2. Global Variable :- A Variable declared inside class body but outside method body is called Global Variable.**

**3. Static Variable:- A Global Variable which consist static keyword will be known as static variable.**

Sample for How to Create Object of a class.

**Class A**

**A obj=new A(); // Constructor**

**Class Demo**

**Demo obj=new Demo();**

**class Test**

**Test obj=new Test();**

**class Example**

**Example abc=new Example();**