

what is workspace?

A workspace is a location on your machine where all the work you do through Eclipse will be stored as files.

Naming convention:

1) Pascal Notation / Incep Notation
First letter of every word should be in capital letter.

Eg.: Iici Bank, MyFirstProgram,
LoginPage, Facebooklogin.

Followed in : Project Name, class Name.

2) camel Notation:

First letter of first word should be small remaining every word first letter should be Capital.

Eg. iici Bank, myFirstProgram,

~~LoginPage~~ loginPage, facebooklogin.

Followed in method Name.

Project:

How to create a Project?

File → New → Java Project →

Project name → ok.

Eg. Amazon, Facebook (Pascal Notation)

Package:

- A set of classes and interfaces grouped together also known as packages in java.
- package names are written in all lower case to avoid conflict with the names of classes or interfaces.

Uses:

- Java package is used to categorize the classes and interfaces so that they can be easily maintained.
- Easy to locate the related classes and reuse the existing classes in packages.

How to create a package:

Under project we have src
right click on src → New → package
→ name → ok.

Naming the Package:

Extension → company name →
Client name → module name

Eg: com.tcs.trainers.java

Types of Brackets:

{ } ⇒ Braces / Flower Bracket

[] ⇒ Square Bracket

() ⇒ Functional Bracket

< > ⇒ Angular Bracket

class:

- class is a Template or Blue print which consist of functions and data members.
collection of object.

- when classes are defined, the memory is allocated, However when we create objects of these classes, memory is allocated in the heap.

Syntax:

```
public class className  
{  
}
```

Method:

Activity of the class, it consist of business logic.

A method in java is block of code when called, performs specific mentioned it.

The primary uses of methods in java are:

- It allows code reusability (define once and use multiple times)
- You can break a complex program into smaller chunks of code.
- It increases code readability.

Syntax:

```
public void methodName()  
{  
    // business logic  
}
```


Main method:

A main() method in Java is an entry point to start the execution of a program. Every Java application has at least one class and at least one main method.

* Execution starts from main method.

(Syntax::

```
public static void main
```

```
(String [] args)
```

Object:

An object is a class instance that allows programmers to use variables and methods from inside the class.

Object represents a real world entity that you're trying to deal with.

Object is an instance.

(Single occurrence of class)

It is reference and performs

run time memory location.

- It is a superclass of Java.

Eg. Mobile is a class, If mobile is the class then iPhone, Redmi, blackberry, Samsung are its objects which are different properties and behaviours.

object creation

className objectName = new

className();

Example program with package and method:

First Program:

```
package com.march.sample;  
public class FirstProgram  
{  
    public void welcomeMethod()  
{  
    System.out.println  
("Hai everyone welcome  
to aite academy");  
}  
public static void main(  
String [] args)
```

```
FirstProgram fp = new FirstProgram();  
fp.welcomeMethod();  
System.out.println("thank you");
```

}

}

abstract class

can't be instantiated

(abstract class)

example: program with abstract

and method.

FirstProgram: abstract class
welcomeMethod: abstract method