

## Java Package

- A **java package** is a group of similar types of classes, interfaces and sub-packages.
- Package in java can be categorized in two form, built-in package and user-defined package.
- There are many built-in packages such as java, lang, awt, javax, swing, net, io, util, SQL etc.

### Sub package in java

Package inside the package is called the sub package. It should be created to categorize the package further.

### Access Modifiers in Java

There are two types of modifiers in Java: **access modifiers** and **non-access modifiers**.

There are four types of Java access modifiers:

1. **Private:** The access level of a private modifier is only within the class. It cannot be accessed from outside the class.
2. **Default:** The access level of a default modifier is only within the package. It cannot be accessed from outside the package. If you do not specify any access level, it will be the default.
3. **Protected:** The access level of a protected modifier is within the package and outside the package through child class. If you do not make the child class, it cannot be accessed from outside the package.
4. **Public:** The access level of a public modifier is everywhere. It can be accessed from within the class, outside the class, within the package and outside the package.

<b>Access Modifier</b>	<b>within class</b>	<b>within package</b>	<b>outside package by subclass only</b>	<b>outside package</b>
<b>Private</b>	Y	N	N	N
<b>Default</b>	Y	Y	N	N
<b>Protected</b>	Y	Y	Y	N
<b>Public</b>	Y	Y	Y	Y

**Encapsulation in Java** is a process of wrapping code and data together into a single unit, for example, a capsule which is