Package

- **What is a package ?**
  - **A** package in a java is a mechanism to contain classes, sub packages or interfaces. They are used to prevent naming conflicts and for controlling access in addition to make searches and utilization of classes, enumerations, interfaces and annotations easier. It makes things easier for other programmers as they can easily locate related classes.

- **Why is a package required ?**
  - When we write a code in a file and place it in some folder, we can have any number of files in it. Now imagine that a code is released to production and some issues occurred that need to be fixed.
  - For this we need to find the java class in that folder where we have lot of files, which may take time to locate and further act on the bugs.
  - If we want the code to be organized and maintained, we must have a proper folder structure, which is possible through the use of packages
  - **Maintenance –** If any developer has newly joined a company, he can easily reach the files needed.
  - **Reusability -** A common code can be placed in a common folder so that everybody can check that folder and use it
  - **The** package concepts uses two keywords : package and import

- **Syntax for Package :-**
  - **The** syntax for package is :
    - package **com.qc.icici.loan.home**
    - package **com.qc.icici.loan.business**
    - package **com.qc.icici.loan.advance**

  - **In** the above example, the folder starts with **'com'**. This is generally a company specification. In this case, the root folder is **'com'**
  - Then we have subfolder '**qc**'. This is the name of company in which product is developed
  - **icici** is the client name for which we are developing our product
  - **loan** is a project name
  - **home & business** are loan types, and so on
  - **Let** it be noted that we can give any names, this is just a specification. If we write Package **com.hi.hello,** it means **'com', 'hi'** and **'hello' is the** folder structure
  - **Keep** in mind that the root folder should always be same for all classes.