

## 6] Post Experiment Exercise

### A) Extended Theory

1) Explain some of the built in packages in Java.  
Package in Java is a mechanism to encapsulate a group of classes, sub-classes & interfaces which are part of Java API.

(i) `java.lang` :- contains language support classes which define primitive data types, math operations. This package is automatically imported.

(ii) `java.io` :- contains classes for supporting input output operations.

(iii) `java.util` :- contains utility classes which implement data structures like linked list, dictionary.

(iv) `java.applet` :- contains classes for creating applets.

(v) `java.awt` :- contains classes for implementing the components for graphical user interface.

(vi) `java.net` :- contains classes for supporting networking operations.

2) Explain the benefits of using packages in Java.  
The benefits of using packages in Java are as :-

(i) Programmers can define their own packages i.e. a group of classes/interfaces etc.



yash Mahajan SE IT B 04.

- (ii) It is a good practice to group related classes implemented by you so that a programmer can easily determine that the classes, interfaces, enumerations & annotations are related.
- (iii) Since the package creates a new namespace there won't be any name conflict with names in other packages.
- (iv) Using package it is easier to provide access control.

### Q3 Conclusion :-

In this we have studied how packages are implemented in Java by ~~with~~ writing programs that implement the concept of packages.

Packages allow programmers to bundle a group of classes. \* This is a good practice as it makes our code more manageable and readable.

While creating a Java package we should keep in mind that the package statement should ~~be~~ be the first line in the source file. There can be only one package statement in each source file. Packages provide access protection & it removes naming collision.