

JAVA Open BOOK Test

1. Write the difference between nested classes and inner classes with minimum 5 difference.
2. List the advantages of packages
3. List any 10 classes (or) Interfaces of java.io package

1A:- Nested class

→ A nested class is any class defined within another class.

→ It can be static or non-static

→ Static nested classes cannot access instance members of the outer class directly

→ Static nested classes are accessed using the outer class name

→ Static nested classes are mainly used for grouping utility or helper classes.

→ can be created without creating an object of the outer class.

→ used for organising code logically

Inner class

An inner class is nested class that non-static

It is always non-static

Inner classes can access all members of the outer class.

Inner classes are accessed through an instance of the outer class.

Inner classes are used when an object of inner class depends on an object of outer class

Requires an object of the outer class to be created.

used for tight interaction with outer class members

Advantages of packages

Q/A:

1. Avoids confusion - same class names can be used in different packages without conflict.
2. Easy to use again - you can use classes from a package in other programs.
3. Supports modular work - Divides a large program into small, easy parts.
4. Control access - you can decide which parts of the code can be used by others.
5. easy to manage - makes big projects simple to handle and update.
6. Hides details - others can use your classes without seeing the full code.
7. Keeps code neat - Helps to group similar classes together and stay organized.

3/A:

1. File
2. FileInputStream
3. FileOutputStream
4. FileReader
5. FileWriter
6. BufferedReader
7. BufferedWriter
8. InputStream
9. OutputStream
10. PrintStream.