User Defined Package

What is a Package in Java?

A package is a way to organize related classes and interfaces into a single directory structure, which helps manage code better, avoid name conflicts, and control access to classes. You can think of it as a folder that groups related classes together.

**Example Code with User-Defined Package**

Suppose you want to create a package named mypack.

1. **Create a Java File with a Package Declaration** Create a file called A.java with the following code:

**package mypack;**

**public class A {**

**public static void main(String[] args) {**

**System.out.println("Hello");**

**}**

**}**

 The first line, package mypack;, defines the package name.

 The class A belongs to the mypack package.

 Inside the main method, we simply print "Hello" to the console.

**Compile the Java File** Open a terminal or command prompt in the directory where A.java is located, and use the following command to compile:

 -d .: This option tells the compiler to place the compiled .class files into a directory structure matching the package name. Here, . refers to the current directory.

 When you run this command, a folder named mypack will be automatically created in the current directory, and the compiled A.class file will be placed inside this folder. Java mypack.A

**Run the Java File** After compilation, navigate to the current directory and run the following command:

Here, mypack.A refers to the fully qualified name of the class A, where mypack is the package name.

java mypack.A

java mypack.A: This command executes the main method in the A class that belongs to the mypack package.