**Develop a JAVA program to raise a custom exception (user defined exception) for DivisionByZero using try, catch, throw and finally**

**Save Filename As: CustomException.java**

**Solution:-**

**// Custom Exception Class**

**class DivisionByZeroException extends Exception**

**{**

**public DivisionByZeroException (String message) { super (message);**

**}**

**}**

**public class CustomException**

**{**

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

**{**

**int dividend = 10;**

**int divisor = 0;**

**try**

**{**

**if (divisor == 0)**

**{**

**throw new DivisionByZeroException("Cannot divide by zero");**

**}**

**int result = dividend / divisor;**

**System.out.println ("Result: " + result);**

**}**

**catch (DivisionByZeroException e)**

**{**

**System.out.println ("Exception: " + e.getMessage ());**

**}**

**finally**

**{**

**System.out.println ("Finally block executed");**

**}**

**}**

**}**

**Compile As: javac CustomException.java**

**Run As: java CustomException**

**Output:**

**Exception: Cannot divide by zero**

**Finally block executed**

**10. Develop a JAVA program to create a package named mypack and import & implement it in a suitable class**

**Step 1: Create a Package**

**Create a directory named mypack (or any name you prefer) on your file system.Inside the mypack directory, create a Java file named MyClass.java.**

**Step 2: Define the Class in the Package. Open MyClass.java and add the following code:**

**package mypack;**

**public class MyClass**

**{**

**public void display ()**

**{**

**System.out.println("This is a method from the mypack package.");**

**}**

**}**

**Step 3: Create a Main Program**

**Create a new Java file (outside the mypack directory) named MainProgram.java and add the**

**following code:**

**import mypack.MyClass;**

**public class MainProgram**

**{**

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

**{**

**MyClass obj = new MyClass ();**

**obj.display ();**

**}**

**}**

**Step 4: Compile and Run**

**Open a terminal or command prompt and navigate to the directory containing both the mypack directory and MainProgram.java.**

**Compile both files using the following command:**

**javac mypack/MyClass.java MainProgram.java**

**Run the program with the command:**

**java MainProgram**

**Output:**

**This is a method from the mypack package.**