# 16. PROBLEM:

Write a program to create a multilevel package and also creates a reusable class to generate Fibonacci series, where the function to generate fibonacii series is given in a different file belonging to the same package.

# SOURCECODE:

package Mypack.pack1.pack2;

public class assignment16

{

int a=0;

int b=1;

public void fibonacci(int z)

{

System.out.println("Fibonacci series of "+z+"elements are: ");

System.out.println("0");

for(int i=0;i<z-1;i++)

{

int s=a+b;

a=b;

b=s;

System.out.println(s+", ");

}

}

}

//Another class in another package.

import Mypack.pack1.pack2.assignment16;

import java.io.\*;

class assignment16\_a

{

BufferedReader br=new BufferedReader(new InputStreamReader(System.in));

System.out.println("Enter the length of the array: ");

String str1=br.readLine();

int x=Integer.parseInt(str1);

assignment16 b=new assignment16();

b.fibonacci(x);

}

# OUTPUT:

Fibonacci series of 5 elements are:

0, 1, 1, 2, 3, 5,

# DISCUSSION:

1.Here we create assignment16 in package Mypack and in here in Fibonacci method we calculate the Fibonacci series of the given number.

2.Then we create another class assignment16\_a by importing the previous package and class also and here we call the Fibonacci method to get the result.