Exp-12

```
/*WAP: Write a program in java to find
Largest between two number using
packages.*/ //Sayyad Mohamed
Samar //231P082,32 package
compare;

public class Largest {
   public int findLargest(int a, int b) {
      if (a > b) { return
         a;
      } else {
         return b;
      }
   }
}

//The file using the above package
import compare.Largest; import
java.util.Scanner;

public class CompareNumbers {
   public static void main(String[] args) {
      Scanner sc = new Scanner(System.in);

      // Prompt user for two numbers
      System.out.print("Enter the first number: "); int
      num1 = sc.nextInt(); System.out.print("Enter
      the second number: "); int num2 = sc.nextInt();
```

```
        // Create an object of the Largest class from the compare package
        Largest largest = new Largest();

        // Find and print the largest number int
        result = largest.findLargest(num1, num2);
        System.out.println("The largest number is: " + result);
    }
}
```

```
Enter the first number: 4
Enter the second number: 7
The largest number is: 7
```

```
//WAP: Write a program in java to add two number using packages.
// Sayyad Mohamed Samar
//231P082,32
package addNumber;

public class Add {
    // Method to add two integers
    public int add(int a, int b) { return
    a + b;
    }
}
//Code which uses this package import
addNumber.Add; import
java.util.Scanner;

public class addNumbers {
```

```
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        System.out.println("Enter number 1: "); int
        num1 = sc.nextInt();

        System.out.println("Enter number 2: "); int
        num2 = sc.nextInt();

        // Create an instance of the Add class
        Add adder = new Add(); // Corrected this line

        // Call the add method to get the sum
        int result = adder.add(num1, num2); // Corrected this line

        System.out.println("The result is: " + result);
    }
}
```

```
Enter number 1: 4
Enter number 2: 4
The result is: 8

Process finished with exit code 0
```

```
//WAP:Write a program in java to compute factorial of a number using package.
// Sayyad Mohamed Samar
//231P082,32
package factorialCalculator;

public class Factorial {
```

```
    public long calculateFactorial(int n) { if
        (n < 0) {
            throw new IllegalArgumentException("Factorial is not defined for negative numbers.");
        }
        long factorial = 1; for (int
        i = 1; i <= n; i++) {
        factorial *= i;
        }
        return factorial;
    }
}
//File using the above package import
factorialCalculator.Factorial; import
java.util.Scanner; public class
FactorialMain { public static void
main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        // Prompt user for a number
        System.out.print("Enter a number to calculate its factorial: "); int
        number = scanner.nextInt();

        // Create an instance of the Factorial class
        Factorial factorialCalculator = new Factorial();

        // Calculate and display the factorial
        try {
            long result = factorialCalculator.calculateFactorial(number);
            System.out.println("The factorial of " + number + " is: " + result);
        } catch (IllegalArgumentException e) {
```

```
            System.out.println(e.getMessage());
        }
    }
}
```

```
Enter a number to calculate its factorial: 5
The factorial of 5 is: 120

Process finished with exit code 0
```