

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;

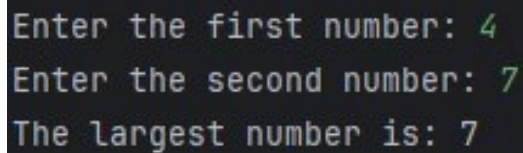
```
public class CompareNumbers {  
    public static void main(String[] args) {  
        Scanner sc = new Scanner(System.in);  
  
        // Prompt user for two numbers  
        System.out.print("Enter the first number: "); int  
        num1 = sc.nextInt(); System.out.print("Enter  
        the 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);
}
}

```



A terminal window with a dark background showing the execution of a Java program. The output consists of three lines: 'Enter the first number: 4', 'Enter the second number: 7', and 'The largest number is: 7'. The numbers 4 and 7 are highlighted in green in the original image.

```

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
```