public class RecursionExample {

// Recursive method to calculate factorial

public static int factorial(int n) {

// Base case: when n is 0, return 1

if (n == 0) {

return 1;

} else {

// Recursive case: n \* factorial of (n-1)

return n \* factorial(n - 1);

}

}

public static void main(String[] args) {

int number = 5; // Example input

int result = factorial(number); // Calling the recursive method

System.out.println("Factorial of " + number + " is: " + result);

}

}