1. Write a program to find the factorial of a given number using a combination of loops. Break the loop if the factorial exceeds 10000.

public class Factorial {

public static void main(String[] args) {

int number = 5; // Change this number to find factorial of a different number

long factorial = 1; // Initialize factorial to 1

for (int i = 1; i <= number; i++) { // Iterate from 1 to the given number

factorial \*= i; // Update factorial by multiplying with the current number

if (factorial > 10000) { // Check if factorial exceeds 10000

System.out.println("Factorial exceeds 10000");

break; // Break the loop if factorial exceeds 10000

}

}

if (factorial <= 10000) { // Print the factorial if it's within 10000

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

}

}

}