import java.util.Scanner;

class DivisionByZeroException extends Exception {

public DivisionByZeroException(String message) {

super(message);

}

}

public class pgm8 {

static double divide(int numerator, int denominator) throws DivisionByZeroException {

if (denominator == 0) {

throw new DivisionByZeroException("Cannot divide by zero!");

}

return (double) numerator / denominator;

}

public static void main(String[] args) {

Scanner input = new Scanner(System.in);

System.out.println("Enter numerator and denominator ");

int numerator = input.nextInt();

int denominator = input.nextInt();

try {

double result = divide(numerator, denominator);

System.out.println("Result of division: " + result);

} catch (DivisionByZeroException e) {

System.out.println("Exception caught: " + e.getMessage());

}

finally {

System.out.println("Finally block executed");

}

}

}