

```
import java.util.Scanner;

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

        try {
            System.out.print("Enter the numerator: ");
            int numerator = sc.nextInt();

            System.out.print("Enter the denominator: ");
            int denominator = sc.nextInt();

            int result = divideNumbers(numerator, denominator);
            System.out.println("Result: " + result);
        }
        catch (ArithmeticException e) {
            System.out.println("Error: Cannot divide by zero. Please enter a non-zero denominator.");
        }
        catch (Exception e) {
            System.out.println("Error: Invalid input. Please enter valid integers.");
        }
        finally {
        }
    }

    public static int divideNumbers(int numerator, int denominator) {
        if (denominator == 0) {
            throw new ArithmeticException("Division by zero is not allowed.");
        }
        return numerator / denominator;
    }
}
```