

Phase-1 Practice Project: Assisted Practice2

5. Writing a program in Java to throws, throw, finally, and custom exceptions in Java.

-->Source code:

```
package main;

@SuppressWarnings("serial")
//Custom exception class
class MyException extends Exception {
    MyException(String message) {
        super(message);
    }
}

//Main class
public class Throws {
    // Method that throws an exception
    static void divide(int a, int b) throws ArithmeticException {
        if (b == 0) {
            throw new ArithmeticException("Divide by zero error");
        } else {
            System.out.println("Result: " + a / b);
        }
    }

    // Method that catches an exception and throws a custom exception
    static void readFromFile(String filename) throws MyException {
```

```

    try {

        // Code to read from file goes here

        throw new Exception("File not found");
    } catch (Exception e) {

        throw new MyException("Error reading file: " + e.getMessage());
    } finally {

        System.out.println("Closing file");
    }
}

// Main method
public static void main(String[] args) {

    // Example of using try-catch block

    try {

        divide(10, 0);
    } catch (ArithmeticException e) {

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

    // Example of using throws keyword

    try {

        readFromFile("test.txt");
    } catch (MyException e) {

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

}
}

```

