

```
import java.io.FileNotFoundException;
import java.io.IOException;
import java.util.Scanner;

/**
 * This program reads a file containing numbers and analyzes its contents. If
 * the file doesn't exist or contains strings that are not numbers, an error
 * message is displayed.
 *
 * Copyright: Horstmann, Big Java 3e, Chapter 11
 */
public class DataAnalyzer {
    public static void main(String[] args) {
        Scanner in = new Scanner(System.in);
        DataSetReader reader = new DataSetReader();

        boolean done = false;
        while (!done) {
            try {
                System.out.println("Please enter the file name: ");
                String filename = in.next();

                double[] data = reader.readFile(filename);
                double sum = 0;
                for (double d : data) {
                    sum = sum + d;
                }
                System.out.println("The sum is " + sum);
                done = true;
            } catch (FileNotFoundException exception) {
                System.out.println("File not found.");
            } catch (BadDataException exception) {
                System.out.println("Bad data: " + exception.getMessage());
            } catch (IOException exception) {
                exception.printStackTrace();
            }
        }
    }
}
```