Find the error:

1.

The try block should be before the catch block.

 try{

            File file = new File("MyFile.txt");

            Scanner inputFile = new Scanner(file);

        }

        catch(FileNotFoundException e){

            System.out.println("File not found.");

        }

2.

The finally block should be after the catch block

  try{

            input = inputFile.nextInt();

        }

        catch(InputMismatchException e){

            System.out.println(e.getMessage());

        }

        finally{

            inputFile.close();

        }

3.

The error is caused by catch blocks that already handle the exception. The Exception class handles the IllegalArgumentException and the NumberFormatException and the IllegalArgumentException already handles the NumberFormatException. To fix this the exceptions that don’t handle other exception must be put before the exceptions that do handle other exceptions.

try{

            number = Integer.parseInt(str);

        }

        catch(NumberFormatException e){

            System.out.println(str + "is not a number");

        }

        catch(IllegalArgumentException e){

            System.out.println("Bad number format");

        }

        catch(Exception e){

            System.out.println(e.getMessage());

        }

Algorithm Workbench:

This code throws a number format exception

Output:

B

D

This code throws the same exception but D prints because final blocks always execute whether or not an error is thrown.

Output:

B

D

E

3.

ExceptionRunner.java

public static void main(String[] args) throws Exception {

        int[] arr = {1,2,3};

        specifiedValue(arr,5);

    }

    /\*\*

     \*  searches for a specified value in the array and returns the subscript for it

     \*  if value is not found throw an exception with the error message "Element not found"

     \* @param arr // array that will be searched

     \* @return

     \* @throws ExceptionTest

     \*/

    public static int specifiedValue(int[] arr, int val) throws ExceptionTest{

        for(int i = 0; i < arr.length; i++){

            if(arr[i] == val){

                return i;

            }

        }

        throw new ExceptionTest("Element Not Found");

    }

ExceptionTest.java

public class ExceptionTest extends Exception {

    public ExceptionTest(String message){

        super(message);

    }

}

4.

if(val < 0){

            throw new IllegalArgumentException("Argument cannot be negative");

        }