Write a program for counting number of characters, words and lines in a file

CODE:

import java.io.BufferedReader;

import java.io.FileReader;

import java.io.IOException;

import java.util.Scanner;

public class FileStatistics1 {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

// Input file name

System.out.print("Enter the file name: ");

String fileName = scanner.nextLine();

try {

// Get file statistics

FileStatistics stats = getFileStatistics(fileName);

// Display statistics

System.out.println("Number of characters: " + stats.characters);

System.out.println("Number of words: " + stats.words);

System.out.println("Number of lines: " + stats.lines);

} catch (IOException e) {

System.out.println("An error occurred while reading the file.");

e.printStackTrace();

} finally {

scanner.close(); // Closing the scanner object

}

}

public static FileStatistics getFileStatistics(String fileName) throws IOException {

int characters = 0;

int words = 0;

int lines = 0;

try (BufferedReader reader = new BufferedReader(new FileReader(fileName))) {

String line;

while ((line = reader.readLine()) != null) {

lines++;

characters += line.length();

words += line.split("\\s+").length; // Split by whitespace to count words

}

}

return new FileStatistics(characters, words, lines);

}

static class FileStatistics {

int characters;

int words;

int lines;

public FileStatistics(int characters, int words, int lines) {

this.characters = characters;

this.words = words;

this.lines = lines;

}

}

}

OUTPUT:

C:\javap>javac FileStatistics1.java

C:\javap>java FileStatistics1

Enter the file name: javap

An error occurred while reading the file.

java.io.FileNotFoundException: javap (The system cannot find the file specified)

at java.base/java.io.FileInputStream.open0(Native Method)

at java.base/java.io.FileInputStream.open(FileInputStream.java:213)

at java.base/java.io.FileInputStream.<init>(FileInputStream.java:152)

at java.base/java.io.FileInputStream.<init>(FileInputStream.java:106)

at java.base/java.io.FileReader.<init>(FileReader.java:60)

at FileStatistics1.getFileStatistics(FileStatistics1.java:34)

at FileStatistics1.main(FileStatistics1.java:16)

