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|  | **Assignment 10**   1. Write a program that asks a user for a file name and prints the number of characters, words, and lines in that file.   Use the following class as your main class:  import java.io.FileReader;  import java.io.IOException;  import java. util.Scanner;  /\*\*  This class prints a report on the contents of a file.  \*/  public class FileAnalyzer  {  public static void main(String[] args) throws IOException  {  System.out.println("Filename: ");  Scanner in = new Scanner(System.in);  String name = in.nextLine();  FileCounter counter = new FileCounter();  FileReader reader = new FileReader(name);  Scanner fileIn = new Scanner(reader);  counter.read(fileIn);  fileIn.close();  System.out.println("Characters: " + counter.getCharacterCount());  System.out.println("Words: " + counter.getWordCount());  System.out.println("Lines : " + counter.getLineCount());  }  }  Complete the following class in your solution:  /\*\*  A class to count the number of characters, words, and lines in files.  \*/  public class FileCounter  {  /\*\*  Constructs a FileCounter object.  \*/  public FileCounter()  {  . . .  }  /\*\*  Processes an input source and adds its character, word, and line  counts to this counter.  @param in the scanner to process  \*/  public void read(Scanner in)  {  . . .  }  /\*\*  Gets the number of words in this counter.  @return the number of words  \*/  public int getWordCount()  {  . . .  }  /\*\*  Gets the number of lines in this counter.  @return the number of lines  \*/  public int getLineCount()  {  . . .  }  /\*\*  Gets the number of characters in this counter.  @return the number of characters  \*/  public int getCharacterCount()  {  . . .  }  . . .  }   1. Write a program that is called **CelsiusFahrenheitConverter**. After running this program, the user will first type in a number with either Celsius or Fahrenheit. Then, the user will click a button called “convert”. Finally, there will be a result in another temperature unit showing on the screen. For example, the user type in 70 Celsius and he will get the result of 158 Fahrenheit. 2. Write a program that is called **TwoNumbersCalculator.** After running the program, the user will first type in two numbers(Integer or Double) and then choose one operator from “+”, “-“, “\*”, “/”. After clicking on the button of “calculate”, the result will be shown on the screen. For example, the user type in “5” and “6” and choose “\*”. Then, click the button of “calculate” and the result of 30 will be on the screen. |
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