

## Assignment-07

1. Create a program that reads in a text file and counts the number of words in the file. The program should display the total number of words at the end.

Code <https://codeshare.io/bvOqjA>

```
1 package assignmnet07;
2
3 import java.io.BufferedReader;
4 import java.io.FileReader;
5 import java.io.IOException;
6
7 public class wordcount {
8
9     public static void main(String[] args) {
10         String fileName = "input.txt";
11         int wordCount = 0;
12
13         try (BufferedReader br = new BufferedReader(new FileReader(fileName))) {
14             String line;
15             while ((line = br.readLine()) != null) {
16                 String[] words = line.split("\\s+");
17                 wordCount += words.length;
18             }
19         } catch (IOException e) {
20             e.printStackTrace();
21         }
22
23         System.out.println("Total number of words: " + wordCount);
24     }
25 }
26
```

Problems @ Javadoc Declaration Console ×

queue [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 11:26:32 pm) [pid: 18824]

```
1. Add an element to queue
2. Remove an element from queue
3. Display the queue
4. Exit
Enter your choice:
```

Writable Smart Insert 22 : 9 : 631

2. Create a program that reads in two text files and compares them to see if they are identical. The program should display a message indicating whether the files are identical or not.

Code <https://codeshare.io/dwQWNM>

```
1 assignmnet07;
2
3 import java.io.BufferedReader;
4 import java.io.FileReader;
5 import java.io.IOException;
6
7 class filecomp{
8
9     public static void main(String[] args) {
10         String fileName1 = "C:\\\\Users\\\\ramessa\\\\OneDrive - Tecnotree\\\\Desktop\\file1.txt";
11         String fileName2 = "C:\\\\Users\\\\ramessa\\\\OneDrive - Tecnotree\\\\Desktop\\file2.txt";
12
13         try (BufferedReader br1 = new BufferedReader(new FileReader(fileName1));
14             BufferedReader br2 = new BufferedReader(new FileReader(fileName2))) {
15             String line1, line2;
16             while ((line1 = br1.readLine()) != null && (line2 = br2.readLine()) != null) {
17                 if (!line1.equals(line2)) {
18                     System.out.println("Files are not identical");
19                     return;
20                 }
21             }
22             if (br1.readLine() == null && br2.readLine() == null) {
23                 System.out.println("Files are identical");
24             } else {
25                 System.out.println("Files are not identical");
26             }
27         }
28     }
29 }
```

Problems @ Javadoc Declaration Console ×

<terminated> filecomp [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 11:48:37 pm – 11:48:39 pm) [f

Files are not identical

Writable Smart Insert 11 : 80 : 359

3. Create a program that reads in a text file and creates a new file that contains the same text, but with all the vowels removed.

Code <https://codeshare.io/zyAo4D>

```
1 package assignmnet07;
2
3 import java.io.BufferedReader;
4 import java.io.BufferedWriter;
5 import java.io.FileReader;
6 import java.io.FileWriter;
7 import java.io.IOException;
8
9 public class vowremove{
10
11     public static void main(String[] args) {
12         String inputFileName = "C:\\Users\\ramesa\\OneDrive - Tecnotree\\Desktop\\
13         String outputFileName = "C:\\Users\\ramesa\\OneDrive - Tecnotree\\Desktop\\
14
15         try (BufferedReader br = new BufferedReader(new FileReader(inputFileName))
16             BufferedWriter bw = new BufferedWriter(new FileWriter(outputFileName))
17             String line;
18             while ((line = br.readLine()) != null) {
19                 String newLine = removeVowels(line);
20                 bw.write(newLine);
21                 bw.newLine();
22             }
23         } catch (IOException e) {
24             e.printStackTrace();
25         }
26     }
27 }
```

Problems @ Javadoc Declaration Console ×

<terminated> vowremove [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 11:55:03 pm – 11:55:06 pm)

file2 - Notepad

File Edit View

scryvtnhjm kxdrcftvgbhnjmk1,dcfvgbhnjmk1,|

4. Create a program that reads in a CSV file containing student grades, and calculates the average grade for each student. The program should then write the results to a new CSV file.

Code <https://codeshare.io/N3pQbd>

```
1 package assignmnet07;
2 import java.io.BufferedReader;
3 import java.io.FileReader;
4 import java.io.FileWriter;
5 import java.io.IOException;
6
7 public class csv {
8     public static void main(String[] args) {
9         // Set the input and output file paths
10        String inputFile = "input.csv";
11        String outputFile = "output.csv";
12
13        try {
14            // Create a new FileWriter object for the output file
15            FileWriter writer = new FileWriter(outputFile);
16
17            // Create a new BufferedReader object for the input file
18            BufferedReader reader = new BufferedReader(new FileReader(inputFile));
19
20            // Read the first line of the input file, which contains the column headers
21            String line = reader.readLine();
22
23            // Write the column headers to the output file
24            writer.write(line + ",Average\n");
25
26            // Read the remaining lines of the input file and calculate the average
27            while ((line = reader.readLine()) != null) {
28                // Split the line into an array of strings
29                String[] data = line.split(",");
30
31                // Calculate the average grade for the student
32                double sum = 0;
33                for (int i = 1; i < data.length; i++) {
34                    sum += Double.parseDouble(data[i]);
35                }
36                double average = sum / (data.length - 1);
37
38                // Write the average grade to the output file
39                writer.write(line + "," + average + "\n");
40            }
41
42            // Close the output file
43            writer.close();
44
45            // Close the input file
46            reader.close();
47        } catch (IOException e) {
48            e.printStackTrace();
49        }
50    }
51}
```

The screenshot shows a Microsoft Excel spreadsheet titled 'average - Excel'. The spreadsheet has columns A through S and rows 1 through 21. The data is as follows:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Alice	85																	
2	Bob	75																	
3	Charlie	90																	
4																			
5																			
6																			
7																			
8																			
9																			
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The status bar at the bottom shows 'Ready', '22°C Sunny', and the date '01-03-2023'.

5. Create a program that reads in a binary file containing image data, and displays the image on the screen.

Code <https://codeshare.io/zyAoob>

```
1 package assignmnet07;
2 import java.awt.*;
3 import java.awt.image.BufferedImage;
4 import java.io.*;
5
6 import javax.imageio.ImageIO;
7 import javax.swing.*;
8
9 public class binary {
10     public static void main(String[] args) {
11         // Set the input file path
12         String inputFile = "C:\\Users\\ramesa\\OneDrive - Tecnotree\\Desktop\\file";
13
14         try {
15             // Create a new FileInputStream object for the input file
16             FileInputStream inputStream = new FileInputStream(inputFile);
17
18             // Read the image data from the input file into a byte array
19             byte[] imageData = inputStream.readAllBytes();
20
21             // Create a new BufferedImage object from the image data
22             BufferedImage image = ImageIO.read(new ByteArrayInputStream(imageData));
23
24             // Create a new JFrame object to display the image
25             JFrame frame = new JFrame("Image");
26             frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
```