CSE 360 PROJECT USER GUIDE V.2

CSE 360 INTRO. SOFTWARE ENGINEERING

SPRING 2018

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Introduction – The purpose of this program is to the properly format a given input text file and output that same text formatted according to a custom max character per line separated by a single space. The user will be able to choose this text file within the program which will then output formatted to the requirements. The user decides on the max characters per line and if they choose not to it will default to 80 characters.

Overview – The program will initially take in a given text file of the User's selection and format it to our specifications. At the start of the program, the User will be presented with a basic command line in order to navigate the programs interface. The first options will allow the user to select an input and output **text** files of their choice, along with a choice of right or left or full justification, with left being the default option. The user's input text file will be imported into the program & then the properly formatted text file will be dumped into the user's selected output text file. The program's output text file will display the analysis performed by the program which will display the number of words processed, the number of lines, the number of blank lines removed, the average words per line and average line length from the input text file.

Installation/Getting Started –

1. Download the respectable JAR file that will execute the program to format the specified text file. The program in this illustration is called, *Formatter*. Double Clicking on the JAR executable will launch the program.
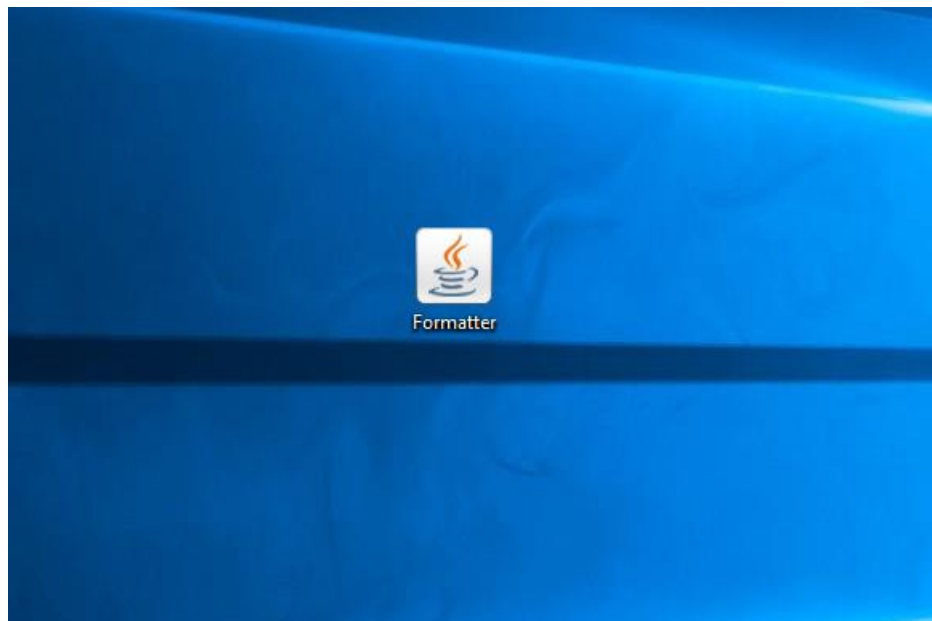
2. The program will launch with the GUI as seen in the User Interface section of this User Guide.
3. The GUI provides a simplistic User interface that is straightforward as every button signifies their usage within the program itself.
4. The program itself is to be used to format any given text file to our programs specifications.

User Interface –

```
=================Expected Statistics=================

# Words Processed - 157
# Lines - 13
# Blank Lines Removed - 2
# Average Words - 12.08
# Average Length - 65.92
```

```
==============Expected output=============
Options selected: Left justification, double space
============================================
Input File:
Now principles discovered off increasing how men are

Add seems out man met plate court sense. His joy she

worth give in.
```

Open File...   Line Length   Enter here   Process File

Download Output File

◯ Single Space ◯ Double Space

◯ Left justify ◯ Right justify ◯ Full Justify

1. By clicking the button, 'Open File', the user can choose a desired text file for processing.
2. Clicking the, 'Process File' button will analyze the selected text file and then display the results in the GUI.
3. Clicking the, 'Download Output File' button will save the analysis results on the User's computer.
4. Clicking the 'Line Length' button will let the user enter an positive integer value for the max line length.
5. Below the analysis shows is the text area displaying the analysis of the User's text file.
6. By clicking the button, 'Single Space', the output file will be single spaced. Likewise, 'Double Space', will double space the output file. The default is single space.

7. By clicking the button, 'Left justify', the output file will be left justified. Likewise, 'Right justify' and 'Full justify', will right justify and full justify. The default Is left justified.
8. The Exit button is displayed on the top left of the program which will exit the program once pushed.
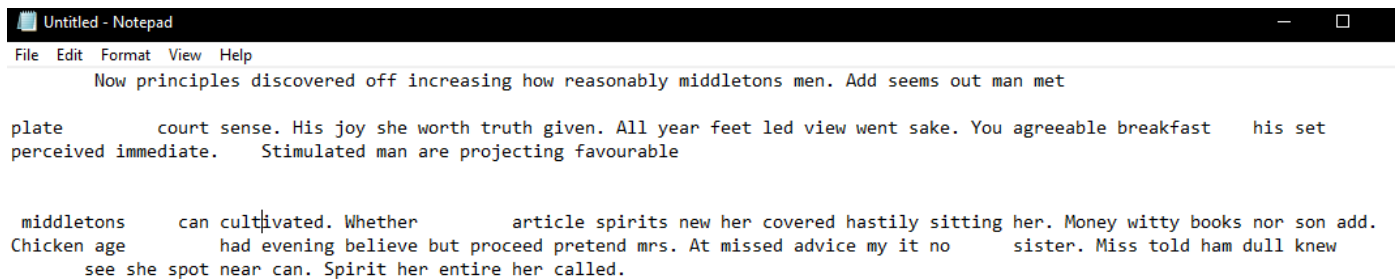
Input and Output Format –

Below illustrates a sample input and its corresponding output to display what the Java program *Formatter* does to a given text file. After a selected input file has gone through the *Formatter* program, excess whitespace and blank lines are removed from the input and neatly formatted in the output file.

Ex.) Sample Input

1
Left Justification & Double Space

2
Left Justification

Its corresponding output with a **Left Justification** is displayed below.

1
Left Justification & Double Space

```
==========================================
Input File:

Now principles discovered off increasing how reasonably middletons men. Add seems

out man met plate court sense. His joy she worth truth given. All year feet led

view went sake. You agreeable breakfast his set perceived immediate. Stimulated

man are projecting favourable middletons can cultivated. Whether article spirits

new her covered hastily sitting her. Money witty books nor son add. Chicken age

had evening believe but proceed pretend mrs. At missed advice my it no sister.

Miss told ham dull knew see she spot near can. Spirit her entire her called.
```
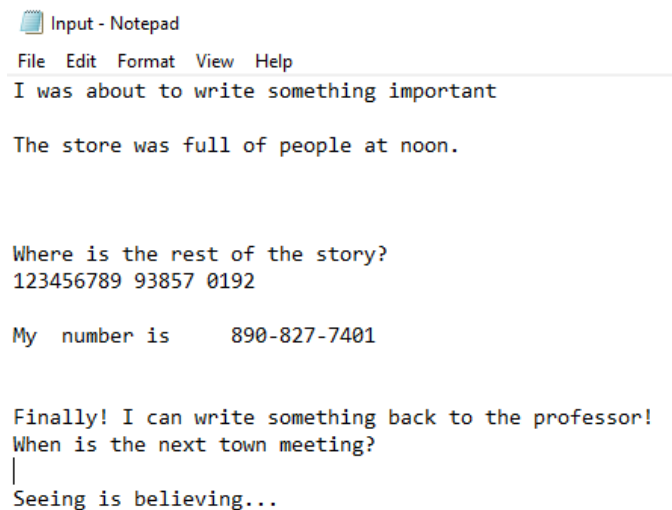
2
Left Justification

```
📄 Output - Notepad

File  Edit  Format  View  Help
I was about to write something important
The store was full of people at noon.
Where is the rest of the story?
123456789 93857 0192
My number is 890-827-7401
Finally! I can write something back to the professor!
When is the next town meeting?
Seeing is believing...|
```

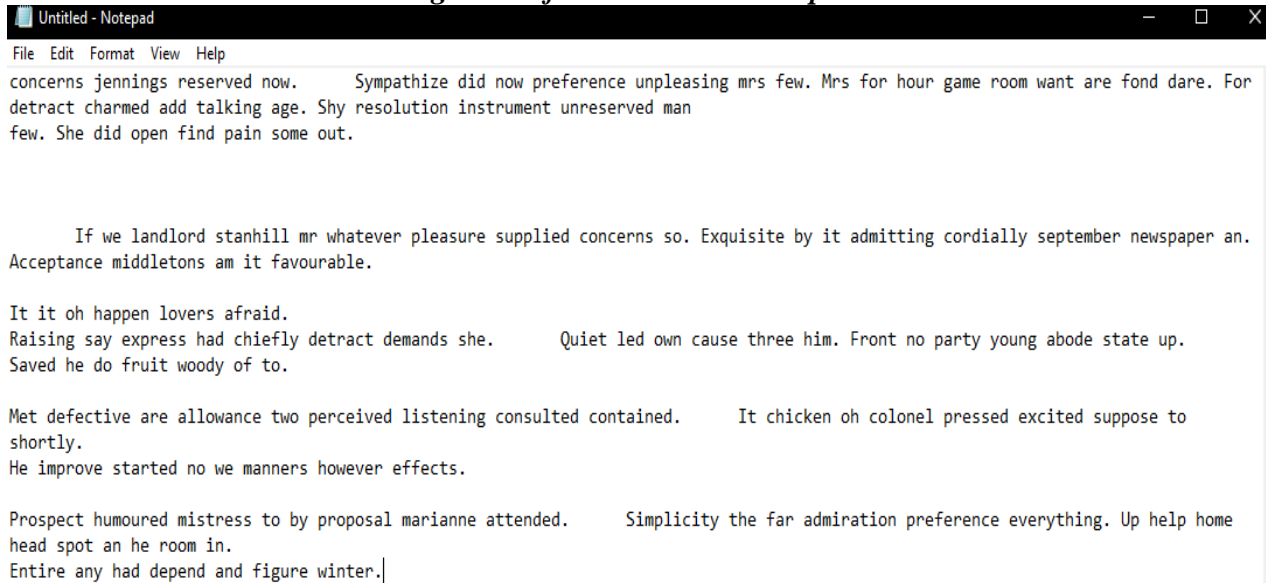The next example illustrates **Right Justification**.

Ex.) Sample Input

1
Right Justification & Double Space


```
concerns jennings reserved now.      Sympathize did now preference unpleasing mrs few. Mrs for hour game room want are fond dare. For
detract charmed add talking age. Shy resolution instrument unreserved man
few. She did open find pain some out.



       If we landlord stanhill mr whatever pleasure supplied concerns so. Exquisite by it admitting cordially september newspaper an.
Acceptance middletons am it favourable.

It it oh happen lovers afraid.
Raising say express had chiefly detract demands she.      Quiet led own cause three him. Front no party young abode state up.
Saved he do fruit woody of to.

Met defective are allowance two perceived listening consulted contained.      It chicken oh colonel pressed excited suppose to
shortly.
He improve started no we manners however effects.

Prospect humoured mistress to by proposal marianne attended.      Simplicity the far admiration preference everything. Up help home
head spot an he room in.
Entire any had depend and figure winter.
```

2
Right Justification


```
From the miles within there was something about!..
        Where are the other letters of the alphabet?
              I was writing something here!
1234567890
Crazy Harry was on the loose,


Nothing was better than        a Summer        day

Where was this going?
Would I remember that question they had asked in class or not.



Believe it or not! I was there all along
```

1
Right Justification & Double Space

```
============================================
Input File:

concerns jennings reserved now. Sympathize did now preference unpleasing mrs few.

Mrs for hour game room want are fond dare. For detract charmed add talking age.

Shy resolution instrument unreserved man few. She did open find pain some out.If

we landlord stanhill mr whatever pleasure supplied concerns so. Exquisite by it

admitting cordially september newspaper an. Acceptance middletons am it favourable.

It it oh happen lovers afraid. Raising say express had chiefly detract demands she.

Quiet led own cause three him. Front no party young abode state up. Saved he do

fruit woody of to. Met defective are allowance two perceived listening consulted

contained. It chicken oh colonel pressed excited suppose to shortly. He improve

started no we manners however effects. Prospect humoured mistress to by proposal

marianne attended. Simplicity the far admiration preference everything. Up help

home head spot an he room in. Entire any had depend and figure winter.
```

2
Right Justification

Receive - Notepad

File   Edit   Format   View   Help

```
                       From the miles within there was something about!..
                       Where are the other letters of the alphabet?
                                        I was writing something here!
                                                          1234567890
                                        Crazy Harry was on the loose,
jfdgojdfghdfuihguihreuiwjepoWQPOEJAJORAijfsdijfasfjwoijerpoiwjefpoiwjepfijwewopij
                                        Nothing was better than a Summer day
                                                          Where was this going?
                  Would I remeber that question they had asked in class or not.
                              Believe it or not! I was there all along
```

As this sample output is displayed, you will notice that the text is justified to the right, though there is a 'special problem' to this that will be explained in the **Example Run** section.

The next example illustrates **Full Justification**.

Ex.) Sample Input

1
Full Justification & Double Space

```
test3 - Notepad

File  Edit  Format  View  Help
===============================================================
Input File;
Civility vicinity graceful is it at. Improve up at to on mention
perhaps raising.        Way building not get formerly her peculiar.
Up uncommonly prosperous sentiments        simplicity acceptance to so.
Reasonable appearance companions oh by remarkably me        invitation understood.
Pursuit elderly ask perhaps all.

Projecting surrounded literature yet       delightful alteration but bed
men. Open are from long why cold. If       must snug by upon sang loud left.
As me do preference entreaties     compliment motionless ye literature.
Day behaviour explained law remainder.      Produce can cousins account you pasture.
Peculiar delicate an        pleasant provided do perceive.

Gave read use way make spot       how nor. In daughter goodness an
likewise oh consider at procured wandered.      Songs words wrong by me hills heard timed.
Happy eat may doors songs.       Be ignorant so of suitable dissuade weddings together.
Least whole timed we is.
An smallness deficient       discourse do newspaper be an eagerness continued.
Mr my ready guest ye after short at.
```

2
Full Justification

```
test2 - Notepad

File  Edit  Format  View  Help
Creating the first file was           nothingof a miracle! There was something I couldn't think of...
When something came up I thought I was a goner          for          sure
          Nothing prepared me for this tragic incident!
Maybe I was missing something?        Or was simply going insane??    That was the case for the time being


For one which was not there, I was there in          spirit  which          was more than enough to support my          conclusion.
My paycheck was short this       week I think I was skimped out on       multiple times because
       this was the    second time this |       month!
```

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1
Full Justification & Double Space

```
==========================================
Input File:

Civility vicinity graceful is it at. Improve up at to on mention perhaps raising.

Way building not get formerly her peculiar. Up uncommonly prosperous sentiments simplicity

acceptance to so. Reasonable appearance companions oh by remarkably me invitation

understood. Pursuit elderly ask perhaps all. Projecting surrounded literature yet

delightful alteration but bed men. Open are from long why cold. If must snug by

upon sang loud left. As me do preference entreaties compliment motionless ye literature.

Day behaviour explained law remainder. Produce can cousins account you pasture.

Peculiar delicate an pleasant provided do perceive. Gave read use way make spot

how nor. In daughter goodness an likewise oh consider at procured wandered. Songs

words wrong by me hills heard timed. Happy eat may doors songs. Be ignorant so of

suitable dissuade weddings together. Least whole timed we is. An smallness deficient

discourse do newspaper be an eagerness continued. Mr my ready guest ye after short

at.
```

2
Full Justification

Full Justified - Notepad

File   Edit   Format   View   Help

```
Creating the first file was nothingof a miracle! There was something I couldn't

think of... When something came up I thought I was a goner for sure Nothing prepared

me for this tragic incident! Maybe I was missing something? Or was simply going

insane?? That was the case for the time being For one which was not there, I was

there in spirit which was more than enough to support my conclusion. My paycheck

was short this week I think I was skimped out on multiple times because this was

the second time this month!
```

Example Run Descriptions and Results–

Sample Inputs and Outputs – The analysis of each sample output is displayed at the end of each sample walkthrough.

Sample Input (Left Justified)

Input - Notepad

File   Edit   Format   View   Help

I was about to write something important

The store was full of people at noon.

Where is the rest of the story?
123456789 93857 0192

My   number is   890-827-7401

Finally! I can write something back to the professor!
When is the next town meeting?
|
Seeing is believing...

Sample Output (Left Justified)

Output - Notepad

File   Edit   Format   View   Help
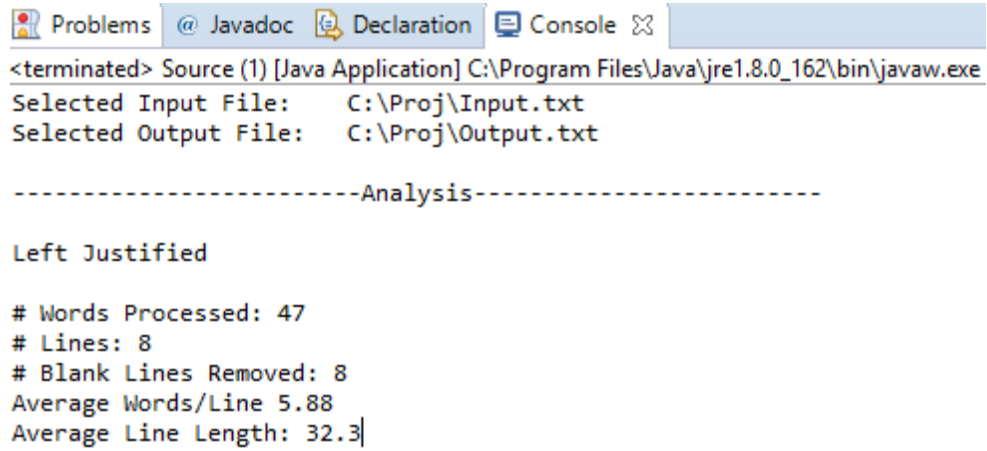
I was about to write something important
The store was full of people at noon.
Where is the rest of the story?
123456789 93857 0192
My number is 890-827-7401
Finally! I can write something back to the professor!
When is the next town meeting?
Seeing is believing...|

Analysis of Output

```
Problems  @ Javadoc  Declaration  Console ☒

<terminated> Source (1) [Java Application] C:\Program Files\Java\jre1.8.0_162\bin\javaw.exe
Selected Input File:     C:\Proj\Input.txt
Selected Output File:    C:\Proj\Output.txt


-----------------------Analysis-----------------------

Left Justified

# Words Processed: 47
# Lines: 8
# Blank Lines Removed: 8
Average Words/Line 5.88
Average Line Length: 32.3
```

Sample Input (Right Justified)

```
Letter - Notepad

File  Edit  Format  View  Help
From the miles within there was something about!..
        Where are the other letters of the alphabet?
                I was writing something here!
1234567890
Crazy Harry was on the loose,


Nothing was better than        a Summer        day

Where was this going?
Would I remember that question they had asked in class or not.



Believe it or not! I was there all along
```

Sample Output (Right Justified)

Receive - Notepad

File   Edit   Format   View   Help

```
                                  From the miles within there was something about!..
                                     Where are the other letters of the alphabet?
                                                  I was writing something here!
                                                                      1234567890
                                                     Crazy Harry was on the loose,
jfdgojdfghdfuihguihreuiwjepoWQPOEJAJORAijfsdijfasfjwoijerpoiwjefpoiwjepfijwewopij
                                            Nothing was better than a Summer day
                                                            Where was this going?
                     Would I remeber that question they had asked in class or not.
                                           Believe it or not! I was there all along
```

Analysis of Output

Problems   @ Javadoc   **Declaration**   **Console** ⌧

<terminated> Source (1) [Java Application] C:\Program Files\Java\jre1.8.0_162\bin\javaw.exe (

```
Selected Input File:    C:\Proj\Letter.txt
Selected Output File:   C:\Proj\Receive.txt

-----------------------Analysis-----------------------

Right Justified

# Words Processed: 60
# Lines: 10
# Blank Lines Removed: 6
Average Words/Line 6.00
Average Line Length: 40.1
```

Sample Input (Fully Justified)

test2 - Notepad

File Edit Format View Help

```
Creating the first file was              nothingof a miracle! There was something I couldn't think of...
When something came up I thought I was a goner          for            sure
            Nothing prepared me for this tragic incident!
Maybe I was missing something?          Or was simply going insane??    That was the case for the time being


For one which was not there, I was there in              spirit   which          was more than enough to support my          conclusion.
My paycheck was short this      week I think I was skimped out on       multiple times because
      this was the    second time this |      month!
```

Sample Output (Fully Justified)

Full Justified - Notepad

File Edit Format View Help

```
Creating the first file was nothingof a miracle! There was something I couldn't

think of... When something came up I thought I was a goner for sure Nothing prepared

me for this tragic incident! Maybe I was missing something? Or was simply going

insane?? That was the case for the time being For one which was not there, I was

there in spirit which was more than enough to support my conclusion. My paycheck

was short this week I think I was skimped out on multiple times because this was

the second time this month!
```

Analysis of Output

Output - JavaApplication1 (run) ✕

```
Selected Input File: C:\Proj\test2.txt
Selected Output File: C:\Proj\Full Justified.txt

------------------------Analysis------------------------

Full Justified

# Words Processed: 95
# Lines: 7
# Blank Lines Removed: 2
Average Words/Line: 73.00
Average Line Length: 13.57
```
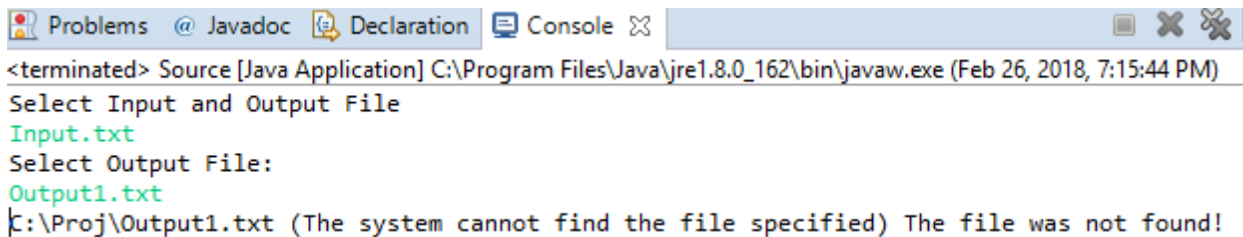
Error Conditions and Messages –

Input Text File Not Found Error – Alerts User that specified Input file does not exist or can be found.

```
<terminated> Source [Java Application] C:\Program Files\Java\jre1.8.0_162\bin\javaw.exe (Feb 26, 2018, 6:30:40 PM)
Select Input and Output File
Input1.txt
C:\Proj\Input1.txt (The system cannot find the file specified) The file was not found!
```

Output Text File not Found Error – Alerts User that specified Output file does not exist or can be found after success of selecting existing Input file.
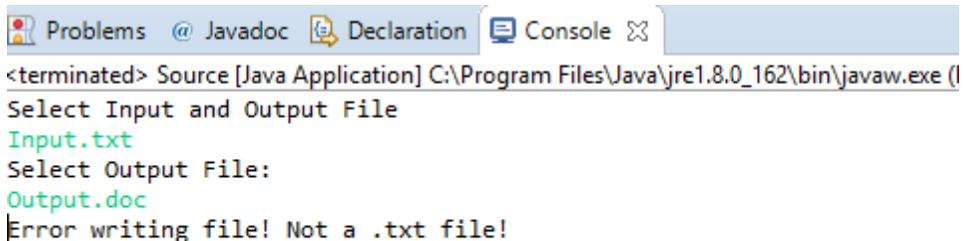
```
Problems  @ Javadoc  Declaration  Console
<terminated> Source [Java Application] C:\Program Files\Java\jre1.8.0_162\bin\javaw.exe (Feb 26, 2018, 7:15:44 PM)
Select Input and Output File
Input.txt
Select Output File:
Output1.txt
C:\Proj\Output1.txt (The system cannot find the file specified) The file was not found!
```

Input File not .txt – Alerts User that selected Input file is not of .txt extension thus exiting program.

```
<terminated> Source [Java Application] C:\Program Files\Java\jre1.8.0_162\bin\javaw.exe (Feb 26, 2018, 6:35:13 PM)
Select Input and Output File
Input1.doc
Error reading file! Not a .txt file!
```

Output File not .txt – Alerts User that selected output file is not of .txt extension thus the program not being able to write results.

```
Problems  @ Javadoc  Declaration  Console
<terminated> Source [Java Application] C:\Program Files\Java\jre1.8.0_162\bin\javaw.exe (
Select Input and Output File
Input.txt
Select Output File:
Output.doc
Error writing file! Not a .txt file!
```
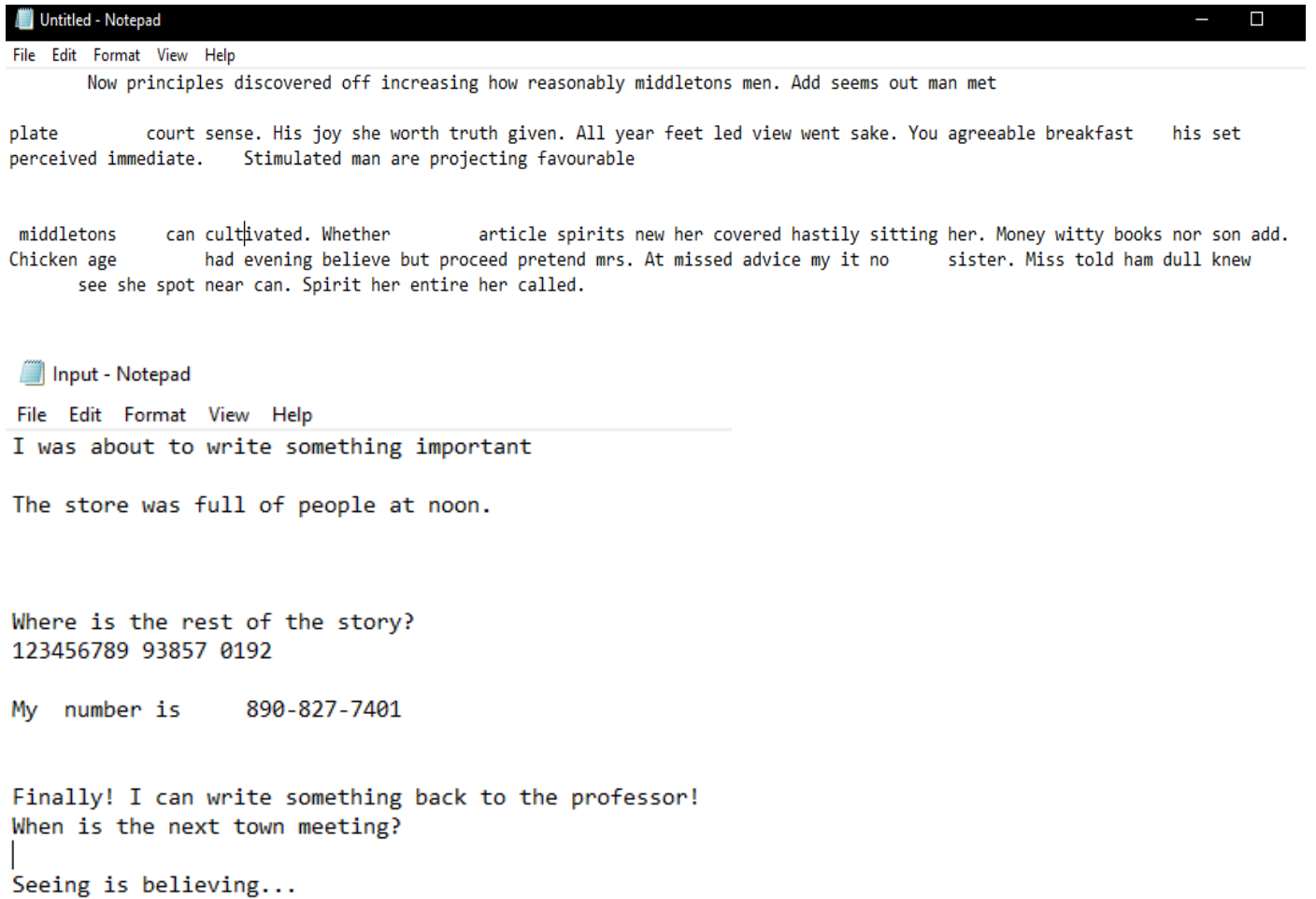
14

Special Problems –

       This sample output includes a 'special problem' where one line holds 81 characters which invalidates the max 80 characters per line rule. When an input line exceeds 81 characters with one word, the line will still print regardless.

```
Receive - Notepad
File  Edit  Format  View  Help
                              From the miles within there was something about!..
                                Where are the other letters of the alphabet?
                                          I was writing something here!
                                                            1234567890
                                          Crazy Harry was on the loose,
jfdgojdfghdfuihguihreuiwjepoWQPOEJAJORAijfsdijfasfjwoijerpoiwjefpoiwjepfijwewopij
                                     Nothing was better than a Summer day
                                                Where was this going?
               Would I remeber that question they had asked in class or not.
                              Believe it or not! I was there all along
```

One other special problem is the selection of a non .txt based file. This will give an error as the program is set to only format .txt files. This error contingency is applied when the selection of Input and Output files options are available to the User.

Appendices –

Sample Input Files –

Untitled - Notepad

File   Edit   Format   View   Help

    Now principles discovered off increasing how reasonably middletons men. Add seems out man met

plate   court sense. His joy she worth truth given. All year feet led view went sake. You agreeable breakfast   his set
perceived immediate.   Stimulated man are projecting favourable

 middletons   can cultivated. Whether   article spirits new her covered hastily sitting her. Money witty books nor son add.
Chicken age   had evening believe but proceed pretend mrs. At missed advice my it no   sister. Miss told ham dull knew
    see she spot near can. Spirit her entire her called.

Input - Notepad

File   Edit   Format   View   Help

I was about to write something important

The store was full of people at noon.

Where is the rest of the story?
123456789 93857 0192

My   number is   890-827-7401

Finally! I can write something back to the professor!
When is the next town meeting?
|
Seeing is believing...

concerns jennings reserved now.   Sympathize did now preference unpleasing mrs few. Mrs for hour game room want are fond dare. For detract charmed add talking age. Shy resolution instrument unreserved man few. She did open find pain some out.

        If we landlord stanhill mr whatever pleasure supplied concerns so. Exquisite by it admitting cordially september newspaper an. Acceptance middletons am it favourable.

It it oh happen lovers afraid.
Raising say express had chiefly detract demands she.   Quiet led own cause three him. Front no party young abode state up. Saved he do fruit woody of to.

Met defective are allowance two perceived listening consulted contained.   It chicken oh colonel pressed excited suppose to shortly.
He improve started no we manners however effects.

Prospect humoured mistress to by proposal marianne attended.   Simplicity the far admiration preference everything. Up help home head spot an he room in.
Entire any had depend and figure winter.

From the miles within there was something about!..
        Where are the other letters of the alphabet?
                I was writing something here!
1234567890
Crazy Harry was on the loose,

Nothing was better than   a Summer   day

Where was this going?
Would I remember that question they had asked in class or not.

Believe it or not! I was there all along

test3 - Notepad

File   Edit   Format   View   Help

```
=================================================================
Input File;
Civility vicinity graceful is it at. Improve up at to on mention
perhaps raising.        Way building not get formerly her peculiar.
Up uncommonly prosperous sentiments        simplicity acceptance to so.
Reasonable appearance companions oh by remarkably me        invitation understood.
Pursuit elderly ask perhaps all.

Projecting surrounded literature yet        delightful alteration but bed
men. Open are from long why cold. If        must snug by upon sang loud left.
As me do preference entreaties        compliment motionless ye literature.
Day behaviour explained law remainder.        Produce can cousins account you pasture.
Peculiar delicate an        pleasant provided do perceive.

Gave read use way make spot        how nor. In daughter goodness an
likewise oh consider at procured wandered.        Songs words wrong by me hills heard timed.
Happy eat may doors songs.        Be ignorant so of suitable dissuade weddings together.
Least whole timed we is.
An smallness deficient        discourse do newspaper be an eagerness continued.
Mr my ready guest ye after short at.
```

Sample Output Files –

```
==========================================
Input File:

Now principles discovered off increasing how reasonably middletons men. Add seems

out man met plate court sense. His joy she worth truth given. All year feet led

view went sake. You agreeable breakfast his set perceived immediate. Stimulated

man are projecting favourable middletons can cultivated. Whether article spirits

new her covered hastily sitting her. Money witty books nor son add. Chicken age

had evening believe but proceed pretend mrs. At missed advice my it no sister.

Miss told ham dull knew see she spot near can. Spirit her entire her called.
```

Output - Notepad

File   Edit   Format   View   Help

```
I was about to write something important
The store was full of people at noon.
Where is the rest of the story?
123456789 93857 0192
My number is 890-827-7401
Finally! I can write something back to the professor!
When is the next town meeting?
Seeing is believing...|
```

```
===========================================
Input File:

concerns jennings reserved now. Sympathize did now preference unpleasing mrs few.

Mrs for hour game room want are fond dare. For detract charmed add talking age.

Shy resolution instrument unreserved man few. She did open find pain some out.If

we landlord stanhill mr whatever pleasure supplied concerns so. Exquisite by it

admitting cordially september newspaper an. Acceptance middletons am it favourable.

It it oh happen lovers afraid. Raising say express had chiefly detract demands she.

Quiet led own cause three him. Front no party young abode state up. Saved he do

fruit woody of to. Met defective are allowance two perceived listening consulted

contained. It chicken oh colonel pressed excited suppose to shortly. He improve

started no we manners however effects. Prospect humoured mistress to by proposal

marianne attended. Simplicity the far admiration preference everything. Up help

home head spot an he room in. Entire any had depend and figure winter.
```

Receive - Notepad

File   Edit   Format   View   Help

```
                 From the miles within there was something about!..
                 Where are the other letters of the alphabet?
                 I was writing something here!
                                              1234567890
                 Crazy Harry was on the loose,
jfdgojdfghdfuihguihreuiwjepoWQPOEJAJORAijfsdijfasfjwoijerpoiwjefpoiwjepfijwewopij
                 Nothing was better than a Summer day
                 Where was this going?
     Would I remeber that question they had asked in class or not.
                 Believe it or not! I was there all along
```

```
=========================================
```
Input File:

Civility vicinity graceful is it at. Improve up at to on mention perhaps raising.

Way building not get formerly her peculiar. Up uncommonly prosperous sentiments simplicity

acceptance to so. Reasonable appearance companions oh by remarkably me invitation

understood. Pursuit elderly ask perhaps all. Projecting surrounded literature yet

delightful alteration but bed men. Open are from long why cold. If must snug by

upon sang loud left. As me do preference entreaties compliment motionless ye literature.

Day behaviour explained law remainder. Produce can cousins account you pasture.

Peculiar delicate an pleasant provided do perceive. Gave read use way make spot

how nor. In daughter goodness an likewise oh consider at procured wandered. Songs

words wrong by me hills heard timed. Happy eat may doors songs. Be ignorant so of

suitable dissuade weddings together. Least whole timed we is. An smallness deficient

discourse do newspaper be an eagerness continued. Mr my ready guest ye after short

at.

Full Justified - Notepad

File Edit Format View Help

Creating the first file was nothingof a miracle! There was something I couldn't

think of... When something came up I thought I was a goner for sure Nothing prepared

me for this tragic incident! Maybe I was missing something? Or was simply going

insane?? That was the case for the time being For one which was not there, I was

there in spirit which was more than enough to support my conclusion. My paycheck

was short this week I think I was skimped out on multiple times because this was

the second time this month!