

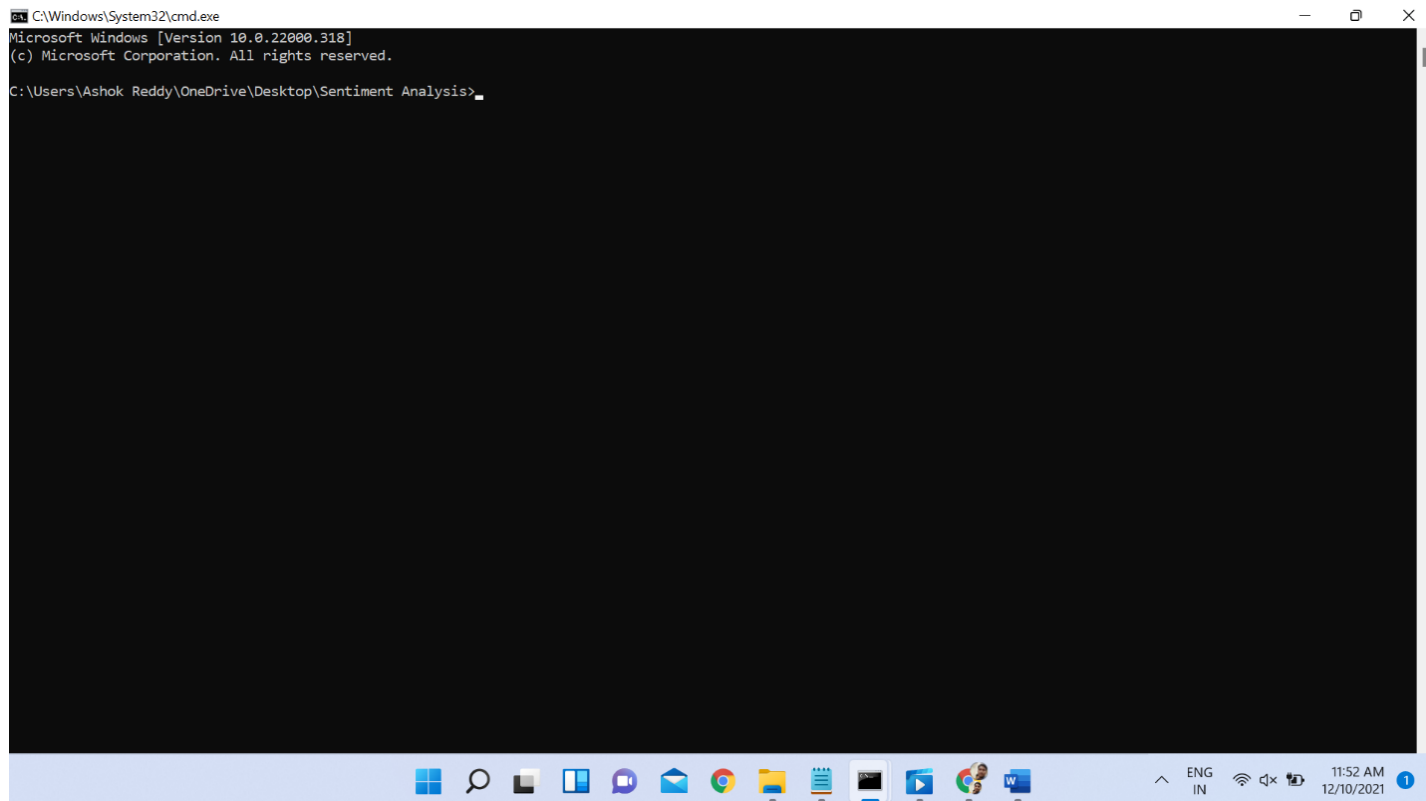
# Execution of Sentiment Analysis

## Installation

- Install python on your PC
- Open command prompt on windows
- Start Windows PowerShell session in a Command Prompt window by command PowerShell.exe
- Install mrjob by command `pip install mrjob`
- Install pandas by command `pip install pandas`
- Install nltk library by command `pip install nltk`
- Install matplotlib by command `pip install matplotlib`
- Import nltk to python
- Download package vader\_lexicon by `nltk.download('vader_lexicon')`
- Download package punkt by `nltk.download('punkt')`

## Execution

1. Open command prompt and set path for project folder



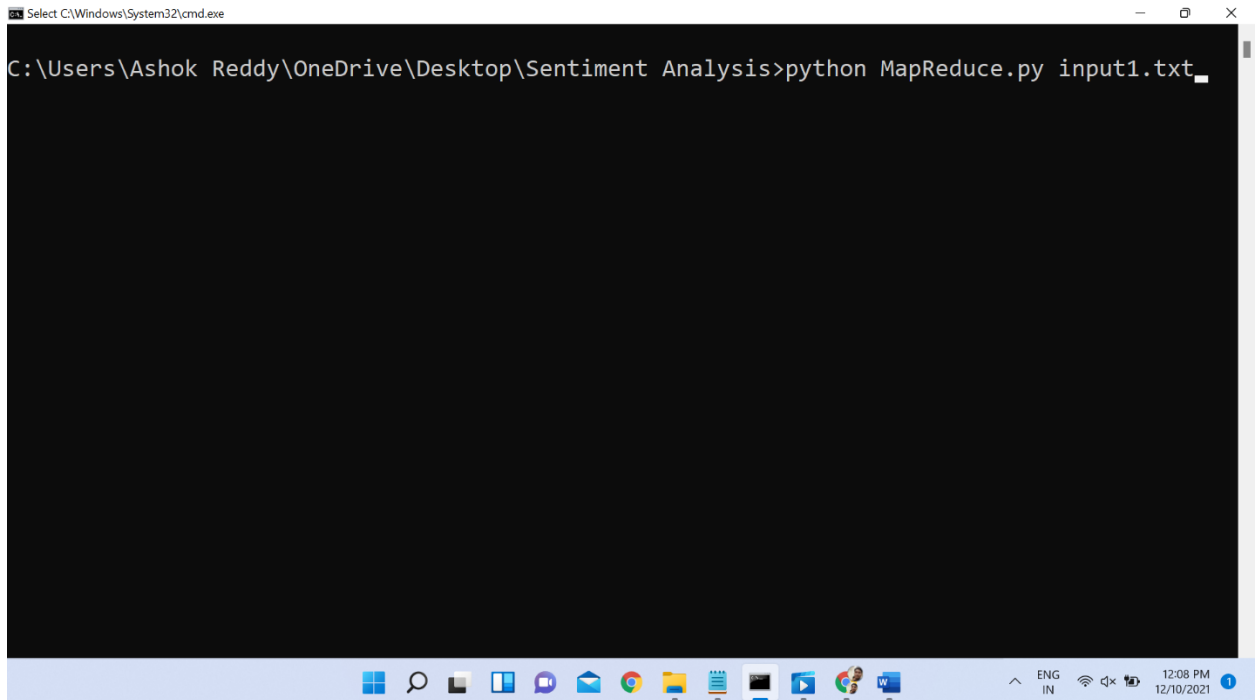
The screenshot shows a Windows Command Prompt window. The title bar indicates the path `C:\Windows\System32\cmd.exe`. The window content displays the following text:

```
Microsoft Windows [Version 10.0.22000.318]  
(c) Microsoft Corporation. All rights reserved.  
  
C:\Users\Ashok Reddy\OneDrive\Desktop\Sentiment Analysis>
```

The taskbar at the bottom of the screen shows various application icons and the system clock indicating 11:52 AM on 12/10/2021.

2. Provide input file path to the MapReduce program

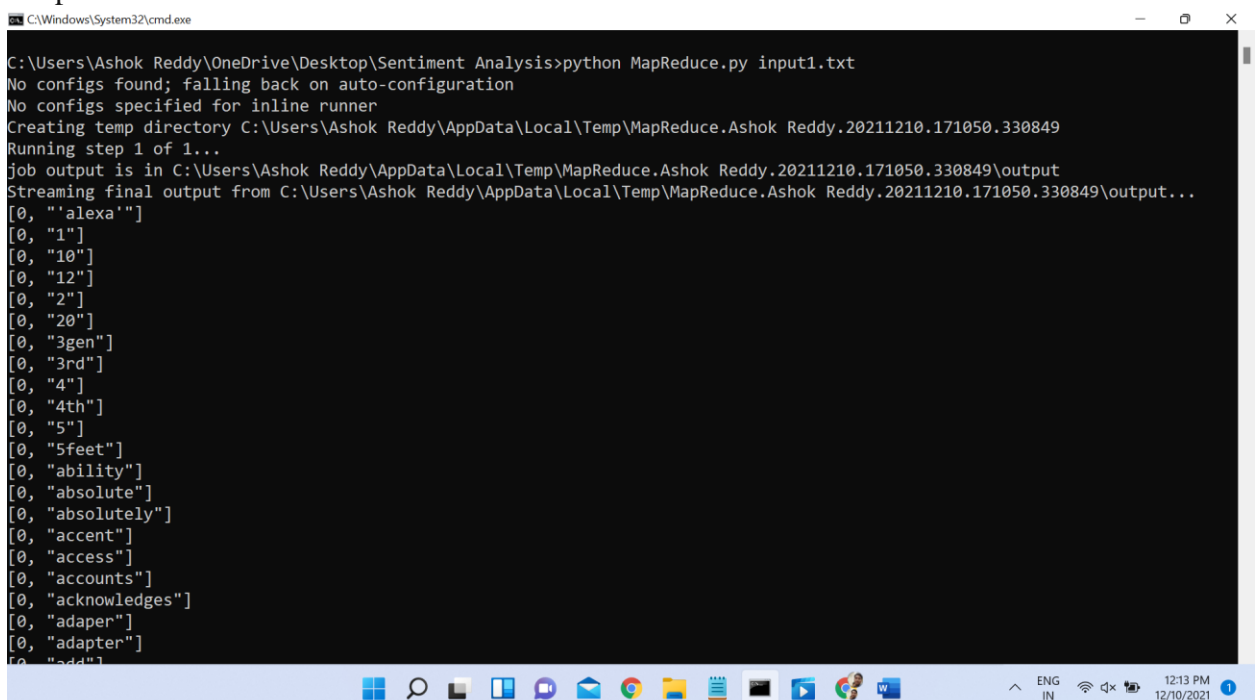
In my case: Command- python MapReduce.py input1.txt



```
Select C:\Windows\System32\cmd.exe

C:\Users\Ashok Reddy\OneDrive\Desktop\Sentiment Analysis>python MapReduce.py input1.txt
```

Output: -



```
C:\Windows\System32\cmd.exe

C:\Users\Ashok Reddy\OneDrive\Desktop\Sentiment Analysis>python MapReduce.py input1.txt
No configs found; falling back on auto-configuration
No configs specified for inline runner
Creating temp directory C:\Users\Ashok Reddy\AppData\Local\Temp\MapReduce.Ashok Reddy.20211210.171050.330849
Running step 1 of 1...
job output is in C:\Users\Ashok Reddy\AppData\Local\Temp\MapReduce.Ashok Reddy.20211210.171050.330849\output
Streaming final output from C:\Users\Ashok Reddy\AppData\Local\Temp\MapReduce.Ashok Reddy.20211210.171050.330849\output...
[0, "alexa"]
[0, "1"]
[0, "10"]
[0, "12"]
[0, "2"]
[0, "20"]
[0, "3gen"]
[0, "3rd"]
[0, "4"]
[0, "4th"]
[0, "5"]
[0, "5feet"]
[0, "ability"]
[0, "absolute"]
[0, "absolutely"]
[0, "accent"]
[0, "access"]
[0, "accounts"]
[0, "acknowledges"]
[0, "adaper"]
[0, "adapter"]
[0, "add"]
```

After the MapReduce file is executed an excel file is created with the name export\_df in the Sentiment analysis folder in my case

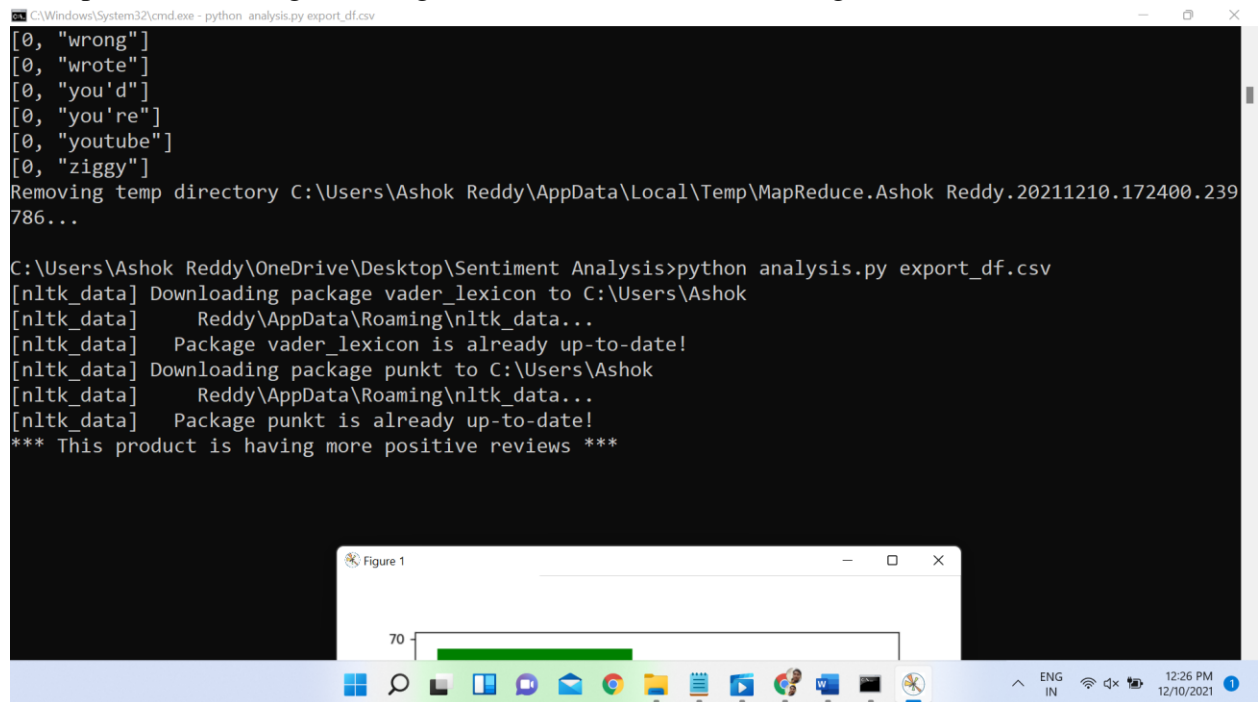
	A	B	C	D	E	F	G	H	I	J	K
234	get	8									
235	getting	1									
236	gift	1									
237	give	1									
238	given	1									
239	glad	1									
240	gmail	1									
241	goes	1									
242	going	1									
243	good	4									

3. Now apply sentiment analysis to the excel file. We get the result as positive or negative.  
Give the excel file as input to the analysis program  
In my case: Command- python analysis.py export\_df.csv

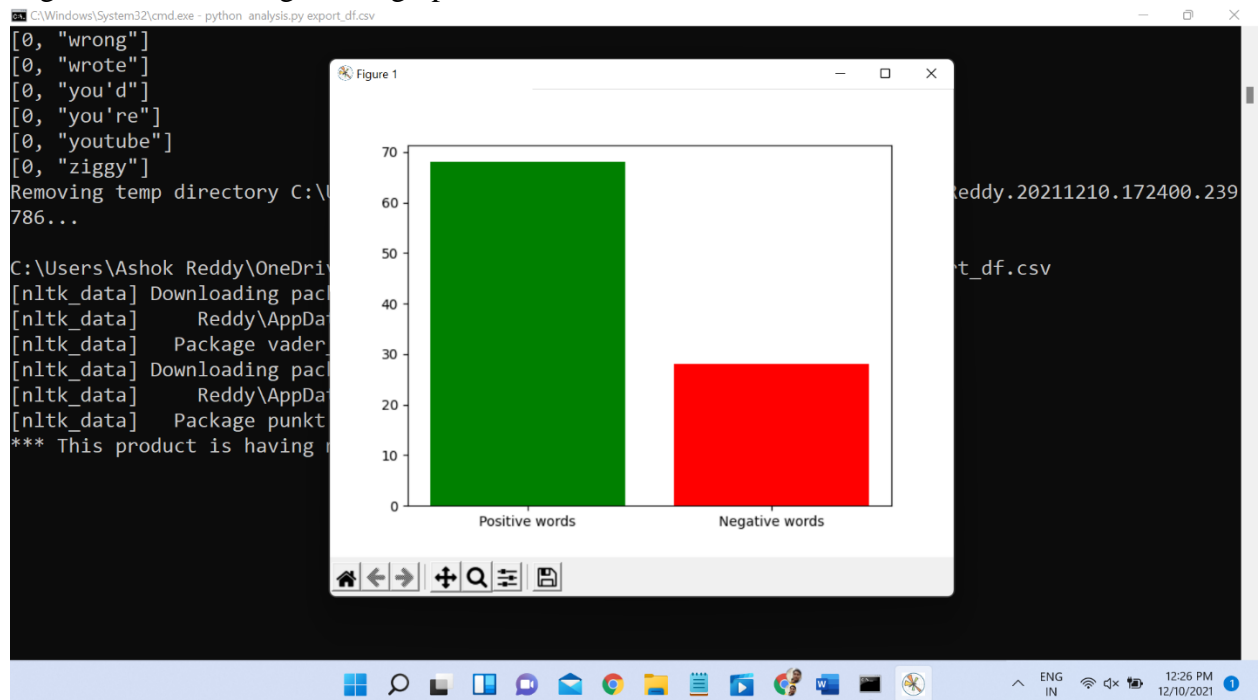
```
C:\Windows\System32\cmd.exe
[0, "worldwide"]
[0, "worth"]
[0, "wouldn't"]
[0, "write"]
[0, "wrong"]
[0, "wrote"]
[0, "you'd"]
[0, "you're"]
[0, "youtube"]
[0, "ziggy"]
Removing temp directory C:\Users\Ashok Reddy\AppData\Local\Temp\MapReduce.Ashok Reddy.20211210.172400.239
C:\Users\Ashok Reddy\OneDrive\Desktop\Sentiment Analysis>python analysis.py export_df.csv
```

Output: -

It gives “The product is having more positive reviews” if it has more positive reviews or “The product is having more negative reviews” if it has more negative reviews.



Based on the polarity scores we portrayed the differences the presence of positive and negative words through a bar graph as shown below.



Results are shown in a scattered graph which is showing the obtained polarity scores in the input text. -1 indicates complete negative word and +1 indicates complete positive word.

