

# ASSIGNMENT-11-Text Mining-01-ELON MUSK

## 1.Perform sentimental analysis on the Elon-musk tweets (Exlon-musk.csv)

```
In [4]: 1 !pip install spacy

Collecting spacy
  Downloading spacy-3.4.2-cp39-cp39-win_amd64.whl (11.9 MB)
Requirement already satisfied: requests<3.0.0,>=2.13.0 in c:\users\admin\anaconda3\lib\site-packages (from spacy) (2.26.0)
Collecting cymem<2.1.0,>=2.0.2
  Downloading cymem-2.0.7-cp39-cp39-win_amd64.whl (30 kB)
Collecting typer<0.5.0,>=0.3.0
  Downloading typer-0.4.2-py3-none-any.whl (27 kB)
Requirement already satisfied: jinja2 in c:\users\admin\anaconda3\lib\site-packages (from spacy) (2.11.3)
Collecting spacy-loggers<2.0.0,>=1.0.0
  Downloading spacy_loggers-1.0.3-py3-none-any.whl (9.3 kB)
Collecting catalogue<2.1.0,>=2.0.6
  Downloading catalogue-2.0.8-py3-none-any.whl (17 kB)
Collecting langcodes<4.0.0,>=3.2.0
  Downloading langcodes-3.3.0-py3-none-any.whl (181 kB)
Collecting preshed<3.1.0,>=3.0.2
  Downloading preshed-3.0.8-cp39-cp39-win_amd64.whl (96 kB)
Collecting srsly<3.0.0,>=2.4.3
  Downloading srsly-2.4.5-cp39-cp39-win_amd64.whl (481 kB)
Collecting spacy-legacy<3.1.0,>=3.0.10
```

```
In [7]: 1 !pip install wordcloud

Collecting wordcloud
  Downloading wordcloud-1.8.2.2-cp39-cp39-win_amd64.whl (153 kB)
Requirement already satisfied: pillow in c:\users\admin\anaconda3\lib\site-packages (from wordcloud) (8.4.0)
Requirement already satisfied: matplotlib in c:\users\admin\anaconda3\lib\site-packages (from wordcloud) (3.4.3)
Requirement already satisfied: numpy>=1.6.1 in c:\users\admin\anaconda3\lib\site-packages (from wordcloud) (1.20.3)
Requirement already satisfied: cycler>=0.10 in c:\users\admin\anaconda3\lib\site-packages (from matplotlib->wordcloud) (0.10.0)
Requirement already satisfied: python-dateutil>=2.7 in c:\users\admin\anaconda3\lib\site-packages (from matplotlib->wordcloud) (2.8.2)
Requirement already satisfied: pyparsing>=2.2.1 in c:\users\admin\anaconda3\lib\site-packages (from matplotlib->wordcloud) (3.0.4)
Requirement already satisfied: kiwisolver>=1.0.1 in c:\users\admin\anaconda3\lib\site-packages (from matplotlib->wordcloud) (1.3.1)
Requirement already satisfied: six in c:\users\admin\anaconda3\lib\site-packages (from cycler>=0.10->matplotlib->wordcloud) (1.16.0)
Installing collected packages: wordcloud
Successfully installed wordcloud-1.8.2.2
```

```
In [8]: 1 import pandas as pd
2 import numpy as np
3 import matplotlib.pyplot as plt
4 import string
5 import spacy
6
7 from matplotlib.pyplot import imread
8 from wordcloud import WordCloud, STOPWORDS
9 %matplotlib inline
```

```
In [9]: 1 # Load the dataset
2 tweets=pd.read_csv('Elon_musk.csv',encoding='latin-1')
3 tweets.drop(['Unnamed: 0'],inplace=True,axis=1)
4 tweets
```

```
Out[9]:
```

	Text
0	@kunalb11 I m an alien
1	@ID_AA_Carmack Ray tracing on Cyberpunk with HDR is next-level. Have you tried it?',
2	@joerogan @Spotify Great interview!
3	@gtera27 Doge is underestimated
4	@teslacn Congratulations Tesla China for amazing execution last year. Now on to the next for even more!!',
...	...
1994	@flcnhvy @anonyx10 Haha thanks :)',
1995	@flcnhvy @anonyx10 Indeed! Tweets definitely do not represent real-world time allocation.',
1996	@TeslaGong @PPathole Samwise Gamgee
1997	@PPathole Altho Dumb and Dumber is <U+0001F525...>
1998	Progress update August 28

1999 rows × 1 columns

## Text Preprocessing

```
In [10]: 1 tweets=[Text.strip() for Text in tweets.Text] #remove both the leading and the trailing characters
2 tweets=[Text for Text in tweets if Text] #remove empty string, because they are considered in python as False
3 tweets[0:10]
```

```
Out[10]: ['@kunalb11 I\x92m an alien',
 '@ID_AA_Carmack Ray tracing on Cyberpunk with HDR is next-level. Have you tried it?',
 '@joerogan @Spotify Great interview!',
 '@gtera27 Doge is underestimated',
 '@teslacn Congratulations Tesla China for amazing execution last year. Now on to the next for even more!!',
 'Happy New Year of the Ox! https://t.co/9WFKMYu2oj', (https://t.co/9WFKMYu2oj),
 'Frodo was the underdodge,\nAll thought he would fail,\nHimself most of all. https://t.co/zGxJFDzrM', (https://t.co/zGxJFDzrM'),
 '@OwenSparks_ @flcnhvy @anonyx10 Haha thanks :)',
 '@flcnhvy @anonyx10 Indeed! Tweets definitely do not represent real-world time allocation.',
 'The most entertaining outcome is the most likely']
```

```
In [11]: 1 # Joining the list into one string/text
2 tweets_text=' '.join(tweets)
3 tweets_text
```

```
Out[11]: '@kunalb11 I\x92m an alien @ID_AA_Carmack Ray tracing on Cyberpunk with HDR is next-level. Have you tried it? @joerogan @Spot
ify Great interview! @gtera27 Doge is underestimated @teslacn Congratulations Tesla China for amazing execution last year. No
w on to the next for even more!! Happy New Year of the Ox! https://t.co/9WFKMYu2oj (https://t.co/9WFKMYu2oj) Frodo was the un
derdodge,\nAll thought he would fail,\nHimself most of all. https://t.co/zGxJFDzrM (https://t.co/zGxJFDzrM) @OwenSparks_ @fl
cnhvy @anonyx10 Haha thanks :) @flcnhvy @anonyx10 Indeed! Tweets definitely do not represent real-world time allocation. The
most entertaining outcome is the most likely @GiveDirectly Just sent some Just agree to do Clubhouse with @kanyewest https://t.co/3rWE9uHSTS (https://t.co/3rWE9uHSTS) @geoffkeighley @UnrealEngine It\x92s getting real Bought some Dogecoin for lil X, s
o he can be a toddler hodler @JoshManMode He definitely has issues, but the sentencing seems a bit high @freewalletorg Thanks
for fixing @freewalletorg Please unlock my account @AstroJordy <U+0001F923><U+0001F923> This is true power haha https://t.co/Fc9uhQsd70 (https://t.co/Fc9uhQsd70) @freewalletorg Any crypto wallet that won\x92t give you your private keys should be avoi
ded at all costs @freewalletorg Your app sucks RT @SpaceX: NASA has selected Falcon Heavy to launch the first two elements of
the lunar Gateway together on one mission! https://t.co/3pWt (https://t.co/3pWt) @ajtourville Yes @BLKMDL3 @RationalEtienne @
Adamklotz_ Once we can predict cash flow reasonably well, Starlink will IPO @RationalEtienne @Adamklotz_ Starlink is a stagge
ringly difficult technical &amp; economic endeavor. However, if we don\x85 https://t.co/9Z8Ac6skqx (https://t.co/9Z8Ac6skqx)
@RationalEtienne @Adamklotz_ SpaceX needs to pass through a deep chasm of negative cash flow over the next year or\x85 http://t.co/731c92hdj1 (https://t.co/731c92hdj1) @ID_AA_Carmack Lowest cost per ton of carbon sequestered, net of value of any p
roduct made. \n\nMust be scalable to g\x85 https://t.co/XMyI7qWSgw (https://t.co/XMyI7qWSgw) @Adamklotz_ It\x92s meant to be
the same price in all countries. Only difference should be taxes &amp; shipping. @tobyliiiiiiii This is intended for Earth,
but there may be some ideas that apply to Mars too @CryptoShrikar @CoinDesk @Tesla @Dan_Z_Palmer <U+0001F923><U+0001F923> XPR
```

```
In [ ]: 1
```