Project: File Handling and String Manipulation

Probem No.-1(Find out the number of unique dialogue speakers in the sample conversation)

In [1]:
```
import pandas as pd
import os
import numpy as np
import matplotlib.pyplot as plt
%matplotlib inline
import re, string
import nz
from collections import defaultdict
```

In [2]:
```
#loading text file
```

In [3]:
```
txt = pd.read_csv('conv_txt',delimiter='\',',header=None,index_col=False)
```

In [4]:
```
txt.head()
```

Out[5]:

	0	1
0	WILL	I've never seen wildlings do a thing like this.
1	WATAMP ROYCE	How close did you get?
2	WILL	Close as any man would.
3	GARED	We should head back to the wall.
4	ROYCE	Do the dead frighten you?
5	GARED	Our orders were to track the wildlings. We t...
6	ROYCE	You don't think he'll ask us how they died? G...
7	WILL	Whatever did to them could do to us. The...

In [6]:
```
txt.columns=['Speaker','Conversation']
# We have set speaker before' | and Conversation after ':'
```

In [7]:
```
txt['Speaker']
```

Out[8]:
```
0          WILL
1     WATAMP ROYCE
2             WILL
3            GARED
4            ROYCE
          ...
106            NED
107        ROBERT
108            NED
109        ROBERT
110            NED
Name: Speaker, Length: 111, dtype: object
```

In [9]:
```
txt['Conversation']
```

Out[10]:
```
0                 I've never seen wildlings do a thing like this.
1                                        How close did you get?
2                                   Close as any man would.
3                                 We should head back to the wall.
4                                      Do the dead frighten you?
5    Our orders were to track the wildlings. We t...
6    You don't think he'll ask us how they died? G...
7                                  Whatever did to them could do to us. The...
Name: Conversation, Length: 111, dtype: object
```

In [11]:
```
#Now, to count the total no. of unique speakers we will make the set
#that will give you unique elements
```

In [12]:
```
speakerset=txt['Speaker'].
```

In [13]:
```
number
for speaker in speakers:
    num = num+1
print("The number of unique dialogue speakers in the sample conversation are",num )
#Printed the long form all lists of speakers,not printed in a
```

The number of unique dialogue speakers in the sample conversation are 17

Problem No.-2:Create a new text file by the name of the dialogue speaker and store the unique sentences spoken by that character in the respective text file. Make sure there is only one word every line.

In [14]:
```
#Now we will create the list.
Words=list(txt['Conversation'])
```

In [15]:
```
conversation_lines[]
final_lines[]
for i in words:
    i = i.lower()
    conversation_lines.append(lowerstr)

conversation_list_clean=re.sub('[!@#$%^&*()<>?:,./]', '', ) for _ in conversation_list

for j in conversation_list_clean:
    lowerstr = j.translate(str.maketrans(''.split()))
    final_lines.append(str_new)

# we have removed all special characters from list using regular expressions
```

In [16]:
```
final_lines
```

Out[16]:
```
['i've never seen wildlings do a thing like this not ever in my life',
 'how close did you get',
 'close as any man would',
 'we should head back to the wall',
 'do the dead frighten you',
 'our orders were to track the wildlings we tracked them they weren't trouble so no more',
 'they weren't trouble so no more they were dead when we found them',
 'whatever did to them could do to us the dead can't hurt you',
 'it's a good thing we're not children you want to run away south of course they will bedead as deserter if i don't catch first get back on your horse won't s
o it's say it again',
 'your dead men seem to have moved camp',
 'they were here',
 'they were here when',
 'what is it',
 'go on father's watching',
 'no bad news',
 'five work bitches well done',
 'thank you',
 'you've had detail that you've managed to get in this corners',
 'and which one of you was a marksman at let beep practicing brax go on',
 'don't think too much brax',
 'relax your bow arm',
 'lord stark my lady a guardsman just rode in from the hills they've captured deserter night's watch',
 'send for your uncle their horses',
 'do you have to',
 'he have an oath cat',
 'i'm sorry my lord',
 'tell brax he's coming too',
 'and too is too young to see such things',
 'tell brax he's coming too because deserter is coming',
 'lad go run back and get the rest',
 'king of the ambals and first men',
 'lord of the seven kingdoms',
 'lord of the seven kingdoms and protector realm i ordered house stark winterfell warden north sentence you to die',
 'you did well',
 'what is it,now there why i did it',
 'jon said he was a deserter',
 'but do you understand why i had to kill him',
 'i know i do',
 'the men who passes sentence should swing sword',
 'is it true he saw the white walkers',
 'the white walkers have been gone for thousands of years',
 'so he was lying',
 'a madman sees what he',
 'i'm sorry',
 'mountain lion',
 'there are no mountain lions in these woods',
 'it's a dire wolf',
 'it's a direwolf',
 'rough old beast',
 'there are no direwolves south of the wall',
 'you said brax',
 'you want to hold it',
 'where will they go their mother's dead',
 'they don't belong down here',
 'they can't survive they won't last without their mother',
 'right give it here',
 'no',
 'put away your blade',
 'i take orders from your father not you',
 'please father',
 'i'm sorry boy',
 'lord stark there are five pups one for each of the children direwolf is sigil your house they were meant to have them',
 'you will train them yourselves feed and if they die bury',
 'i'm sorry',
 'i'm not a stark get on',
 'what is it',
 'the dead can't harm cold someone',
 'but who would',
 'my husband',
 'i'm sure the king both our heads would be sneared on city gates by now whatever jon arryn know or didn't know it died with him and robert will choose a n
ew head if someone to do his job while he's off fucking bears hunting whores is other way around life go',
 'you should be the hand of king',
 'i'm sorry my lord but your father days are too long lines short',
 'all these years and i still feel like an outsider when come here',
 'you have five northern children you're not an outsider',
 'i'm sorry my lord but the north agree',
 'it's your gods with all the rules',
 'i am so sorry my lord',
 'kill me',
 'i hear the prince is a right royal prick',
 'lord stark the king's coming and he gets to stab with his right royal prick',
 'go on tommy show him good he's never met a girl he likes better than his own hair',
 'gods but they grow fast',
 'i know i know i did it but i've a new hand of someone to do his job while he's off fucking bears hunting whores is other way around life g
',
 'i shot up',
 'the dead can't harm cold someone',
 'but who would
```