i	Probem No1(Find out the number of unique dialogue speakers in the sample conversation)
i % i i f	<pre>mport numpy as np mport matplotlib.pyplot as plt matplotlib inline mport string mport re from collections import defaultdict</pre> #loading Text file
In [5]: t Out[5]: 0	WAYMAR ROYCE How close did you get?
2 3 4 5 6 7	GARED We should head back to the wall.  ROYCE Do the dead frighten you?  GARED Our orders were to track the wildlings. We tr  ROYCE You don't think he'll ask us how they died? G
#	<pre>xxt.columns=['Speaker','Conversation'] www have set speaker before': 'and Conversation after ':' xxt['Speaker']  WILL WAYMAR ROYCE WILL</pre>
3 4 1 1 1 1	
In [8]: t Out[8]: 0 1 2 3 4	I've never seen wildlings do a thing like thi  How close did you get?  Close as any man would.  We should head back to the wall.  Do the dead frighten you?
1 1 1 1 N In [9]: #	Tell me about Jon Arryn. One minute he was fine, and then Burned rig We both did. One minute he was fine, and then Burned rig We both did. One minute he was fine, and then Burned rig We both did. One minute he was fine, and then Burned rig We both did. One minute he was fine, and then Burned rig Aye be both did. One minute he was fine, and then Burned rig Aye. One minute he was fine was fine and the set One minute he was fine
in [11]: n	speakers=set(txt['Speaker'])  num=0  for speaker in speakers:     num = num+1  orint("The number of unique dialogue speakers in the sample conversation are", num )  siterated the loop for all sets of speakers, and counted it
F	Problem No2:Create a new text file by the name of the dialogue speaker and store the unique words spoken by that character in the respective text file. Make sure there is only one word every line.
W In [13]: C	<pre>#Now we will create the list. #Ords=list(txt['Conversation'])  #onversation_list=[] #inal_list=[] #or i in Words:     lowerstr=i.lower()     conversation_list.append(lowerstr)</pre>
f	<pre>conversation_list_clean=[re.sub("[-()\"#/@;:&lt;&gt;{}`+=~ .!?,]", "", _) for _ in conversation_list]  for j in conversation_list_clean:     str_test=(' '.join(dict.fromkeys(j.split())))     final_list.append(str_test)  # We have removed all special chartacters from list using regular expressions</pre>
Jul[14]	final_list  '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',
a	'do the dead frighten you', 'our orders were to track the wildlings we tracked them they won't trouble us no more', 'you don't think he'll ask us how they died get back on your horse', 'whatever did it to them could do us they even killed the children', 'it's a good thing we're not children you want to run away south of course they will behead as deserter if i don't catch first get back on your horse won't y it again', 'your dead men seem to have moved camp', 'they were here', 'see where they went',
	'what is it', 'go on father's watching', 'and your mother', 'fine work as always well done', 'thank you', 'i love the detail that you've managed to get in this corners', 'and which one of you was a marksman at ten keep practicing bran go on', 'don't think too much bran', 'relax your bow arm',
	'lord stark my lady a guardsman just rode in from the hills they've captured deserter night's watch',  'get the lads to saddle their horses',  'do you have to',  'he swore an oath cat',  'the law is my lady',  'tell bran he's coming too',  'ned ten is too young to see such things',  'he won't be a boy forever and winter is coming',  'lad go run back and get the rest',
	'king of the andals and first men', 'father will know if you do', 'lord of the seven kingdoms and protector realm i eddard house stark winterfell warden north sentence you to die', 'you did well', 'you understand why i did it', 'jon said he was a deserter', 'but do you understand why i had to kill him', 'our way is the old', 'the man 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', 'what is it', 'mountain lion', 'there are no mountain lions in these woods', 'it's a freak', 'it's a direwolf',
	'tough old beast',  'there are no direwolves south of the wall',  'now there are five',  'you want to hold it',  'where will they go their mother's dead',  'they don't belong down here',  'better a quick death 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 bran', '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', 'what about you', 'i'm not a stark get on', 'what is it',
е	'what if jon arryn told someone', 'but who would he tell', 'my husband', 'if he told the king both our heads would be skewered on city gates by now whatever jon arryn knew or didn't know it died with him and robert will choose a w hand of someone to do his job while he's off fucking boars hunting whores is other way around life go', 'you should be the hand of king', 'that's an honor i can do without their days are too long lives 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 wonder if the old gods agree', 'it's your gods with all the rules', 'i am so sorry my love', 'tell me', 'i hear the prince is a right royal prick', 'think of all those southern girls he gets to stab with his right royal prick', 'go on tommy shave him good he's never met a girl he likes better than his own hair', 'gods but they grow fast', 'i saw the king he's got hundreds of people',
	'how many times have i told you no climbing', 'but he's coming right now down our road', 'i want you to promise me no more climbing', 'your grace', 'you've got fat', 'cat', 'your grace', 'nine years why haven't i seen you where the hell have been', 'guarding the north for you your grace winterfell is yours',
	'where's the imp', 'will you shut up', 'who have we here you must be robb', 'arya', 'ooh show us your muscles you'll be a soldier', 'that's jaime lannister the queen's twin brother', 'would you please shut up', 'my queen', 'my queen',
	'take me to your crypt i want pay my respects', 'we've been riding for a month my love surely the dead can wait', 'ned', 'where's the imp', 'where is our brother go find the little beast', 'tell me about jon arryn', 'one minute he was fine and then burned right through him whatever it i loved that man', 'we both did', 'he never had to teach you much but me remember at 16 all i wanted do was crack skulls and fuck girls showed what',
In [15]: s In [16]: # s f	<pre>'aye']  peaker_list=list(txt['Speaker'])  #Combine Speakers and Conversations peaker_conversation=defaultdict(list) for key, value in zip(speaker_list, final_list):     speaker_conversation[key].append(value) print(speaker_conversation)</pre>
c d k i ' s [	efaultdict( <class 'list'="">, {'WILL': ['i've never seen wildlings do a thing like this not ever in my life', 'close as any man would', 'whatever did it to the ould do us they even killed the children', 'they were here'], 'WAYMAR ROYCE': ['how close did you get'], 'GARED': ['we should head back to the wall', 'our ers were to track the wildlings we tracked them they won't trouble us no more', 'see where they went'], 'ROYCE': ['do the dead frighten you', 'you don't the he'll ask us how they died get back on your horse', 'it's a good thing we're not children you want to run away south of course they will behead as deserted in don't catch first get back on your horse won't say it again', 'your dead men seem to have moved camp', 'what is it'], 'JON': ['go on father's watching' and your mother', 'don't think too much bran', 'father will know if you do', 'you did well', 'what is it', 'now there are five', 'you want to hold it', 'lot tark there are five pups one for each of the children direwolf is sigil your house they were meant to have them', 'i'm not a stark get on'], 'SEPTA MORDANE' 'fine work as always well done', 'i love the detail that you've managed to get in this corners'], 'SANSA': ['thank you', 'will you shut up', 'would you ple shut up'], 'NED': ['and which one of you was a marksman at ten keep practicing bran go on', 'get the lads to saddle their horses', 'he swore an oath cat',</class>
e W h v i n	tell bran he's coming too', 'he won't be a boy forever and winter is coming', 'king of the andals and first men', 'lord of the seven kingdoms and protector alm i eddard house stark winterfell warden north sentence you to die', 'you understand why i did it', 'but do you understand why i had to kill him', 'the m ho passes sentence should swing sword', 'the white walkers have been gone for thousands of years', 'a madman sees what he', 'there are no mountain lions in ese woods', 'it's a direwolf', 'tough old beast', 'better a quick death they won't last without their mother', 'i'm sorry bran', 'you will train them yours es feed and if they die bury', 'you have five northern children you're not an outsider', 'it's your gods with all the rules', 'tell me', 'your grace', 'guang the north for you your grace winterfell is yours', 'my queen', 'tell me about jon arryn', 'we both did', 'aye'], 'ROBB': ['relax your bow arm', 'lad go back and get the rest', 'there are no direwolves south of the wall', 'put away your blade', 'what is it', 'i hear the prince is a right royal prick', 'go ommy shave him good he's never met a girl he likes better than his own hair'], 'CASSEL': ['lord stark my lady a guardsman just rode in from the hills they' aptured deserter night's watch', 'the law is my lady', 'they don't belong down here'], 'CATELYN': ['do you have to', 'ned ten is too young to see such thin
s ' o e o t	', 'all these years and i still feel like an outsider when come here', 'i wonder if the old gods agree', 'i am so sorry my love', 'gods but they grow fast' how many times have i told you no climbing', 'i want you to promise me no more climbing', 'your grace', 'my queen'], 'BRAN': ['jon said he was a deserter', our way is the old', 'is it true he saw the white walkers', 'so he was lying', 'where will they go their mother's dead', 'no', 'please father', 'what about u', 'i saw the king he's got hundreds of people', 'but he's coming right now down our road'], 'THEON': ['mountain lion', 'it's a freak', 'right give it her ', 'i take orders from your father not you', 'think of all those southern girls he gets to stab with his right royal prick'], 'CERSEI': ['what if jon arryn ld someone', 'my husband', 'you should be the hand of king', 'we've been riding for a month my love surely the dead can wait', 'where is our brother go fin he little beast'], 'JAIME': ['but who would he tell', 'if he told the king both our heads would be skewered on city gates by now whatever jon arryn knew or dn't know it died with him and robert will choose a new hand of someone to do his job while he's off fucking boars hunting whores is other way around life ', 'that's an honor i can do without their days are too long lives short'], 'ROBERT': ['you've got fat', 'cat', 'nine years why haven't i seen you where the
h ' W In [17]: <b>f</b> W	ell have been', 'who have we here you must be robb', 'ooh show us your muscles you'll be a soldier', 'take me to your crypt i want pay my respects', 'ned', one minute he was fine and then burned right through him whatever it i loved that man', 'he never had to teach you much but me remember at 16 all i wanted as crack skulls and fuck girls showed what'], 'ARYA': ['where's the imp', 'arya', 'that's jaime lannister the queen's twin brother', 'where's the imp']})  for key, values in speaker_conversation.items():     for i in values:         print(key +":"+i)  ILL:i've never seen wildlings do a thing like this not ever in my life
W W G G G R R	ILL:close as any man would ILL:whatever did it to them could do us they even killed the children ILL:they were here AYMAR ROYCE:how close did you get ARED:we should head back to the wall ARED:our orders were to track the wildlings we tracked them they won't trouble us no more ARED:see where they went OYCE:do the dead frighten you OYCE:you don't think he'll ask us how they died get back on your horse OYCE:it's a good thing we're not children you want to run away south of course they will behead as deserter if i don't catch first get back on your horse w
n R J J J J	't say it again OYCE:your dead men seem to have moved camp OYCE:what is it ON:go on father's watching ON:and your mother ON:don't think too much bran ON:father will know if you do ON:you did well ON:what is it
J J S S S.	ON:now there are five ON:you want to hold it ON:lord stark there are five pups one for each of the children direwolf is sigil your house they were meant to have them ON:i'm not a stark get on EPTA MORDANE:fine work as always well done EPTA MORDANE:i love the detail that you've managed to get in this corners ANSA:thank you ANSA:will you shut up
N N N N N N	ED:and which one of you was a marksman at ten keep practicing bran go on ED:get the lads to saddle their horses ED:he swore an oath cat ED:tell bran he's coming too ED:he won't be a boy forever and winter is coming ED:king of the andals and first men ED:lord of the seven kingdoms and protector realm i eddard house stark winterfell warden north sentence you to die ED:you understand why i did it ED:but do you understand why i had to kill him
N N N N N N	ED:the man who passes sentence should swing sword ED:the white walkers have been gone for thousands of years ED:a madman sees what he ED:there are no mountain lions in these woods ED:it's a direwolf ED:tough old beast ED:better a quick death they won't last without their mother ED:i'm sorry bran ED:you will train them yourselves feed and if they die bury
N N N N N N	ED:you have five northern children you're not an outsider ED:it's your gods with all the rules ED:tell me ED:your grace ED:guarding the north for you your grace winterfell is yours ED:my queen ED:tell me about jon arryn ED:we both did ED:aye
R R R R R C.	OBB:relax your bow arm OBB:lad go run back and get the rest OBB:there are no direwolves south of the wall OBB:put away your blade OBB:what is it OBB:i hear the prince is a right royal prick OBB:go on tommy shave him good he's never met a girl he likes better than his own hair ASSEL:lord stark my lady a guardsman just rode in from the hills they've captured deserter night's watch ASSEL:the law is my lady
C. C. C. C. C. C. C.	ASSEL:they don't belong down here ATELYN:do you have to ATELYN:ned ten is too young to see such things ATELYN:ned ten is too young to see such things ATELYN:all these years and i still feel like an outsider when come here ATELYN:i wonder if the old gods agree ATELYN:i wonder if the old gods agree ATELYN:i am so sorry my love ATELYN:gods but they grow fast ATELYN:how many times have i told you no climbing ATELYN:i want you to promise me no more climbing ATELYN:your grace
C. B B B B B B	ATELYN:my queen  RAN:jon said he was a deserter  RAN:our way is the old  RAN:is it true he saw the white walkers  RAN:so he was lying  RAN:where will they go their mother's dead  RAN:no  RAN:please father  RAN:what about you
B T T T T C	RAN:i saw the king he's got hundreds of people RAN:but he's coming right now down our road HEON:mountain lion HEON:it's a freak HEON:right give it here HEON:i take orders from your father not you HEON:think of all those southern girls he gets to stab with his right royal prick ERSEI:what if jon arryn told someone ERSEI:my husband
C C J. J. a J. R	ERSEI:you should be the hand of king ERSEI:we've been riding for a month my love surely the dead can wait ERSEI:where is our brother go find the little beast AIME:but who would he tell AIME:if he told the king both our heads would be skewered on city gates by now whatever jon arryn knew or didn't know it died with him and robert will chook new hand of someone to do his job while he's off fucking boars hunting whores is other way around life go AIME:that's an honor i can do without their days are too long lives short OBERT:you've got fat OBERT:cat
R R R R R A	OBERT:nine years why haven't i seen you where the hell have been OBERT:who have we here you must be robb OBERT:ooh show us your muscles you'll be a soldier OBERT:take me to your crypt i want pay my respects OBERT:ned OBERT:one minute he was fine and then burned right through him whatever it i loved that man OBERT:he never had to teach you much but me remember at 16 all i wanted do was crack skulls and fuck girls showed what RYA:where's the imp RYA:arya
A In [18]: p	RYA:that's jaime lannister the queen's twin brother RYA:where's the imp  print(speaker_conversation.get('JON'))  'go on father's watching', 'and your mother', 'don't think too much bran', 'father will know if you do', 'you did well', 'what is it', 'now there are five' you want to hold it', 'lord stark there are five pups one for each of the children direwolf is sigil your house they were meant to have them', 'i'm not a s k get on']
[ 1 In [20]: # s	rint(speaker_conversation.get('WILL'))  'i've never seen wildlings do a thing like this not ever in my life', 'close as any man would', 'whatever did it to them could do us they even killed the coden', 'they were here']  *list=[]
# # #	<pre>#print(s) for word in set(s.split(" ")):     print(word)  #WILL=open(r'C:\Users\Dell\Downloads\my_python_project','w') #WILL.write(word) #WILL.close()  print(s)  #WILL-close()  #WILL-txt', 'w', encoding="utf_8",) as f:</pre>
W	for word in set(s.split(" ")):  f.write(f"{word}\n")
l i w e c c	s ife n ildlings ver ould hildren 've
t w e w n h	his hey ere ven hatever ever ould ere
s c t d a u m	
i t t m n	ny t hem hing an ot  i=" " for i in speaker_conversation.get('JON'):
<b>f</b> #	<pre>s=s+" "+i  for word in set(s.split(" ")):     print(word)  fwILL=open(r'C:\Users\Dell\Downloads\my_python_project','w')  fwILL.write(word)  fwILL.close()</pre>
w d a t	<pre>rith open('JON.txt', 'w', encoding="utf_8",) as f:     for word in set(s.split(" ")):         f.write(f"{word}\n")  rill irewolf ind oo eant</pre>
m f o h m g t f	eant or f old uch et hink ather
t i t s w f g o	he 'm hey igil ere ive o n
d i o w p l t	ant o f ne ell ups ord o d
h a y t b a k h	our our here ran re now ave
w t	atching hem on't
d w f n s e	ather's  ow tark ach other