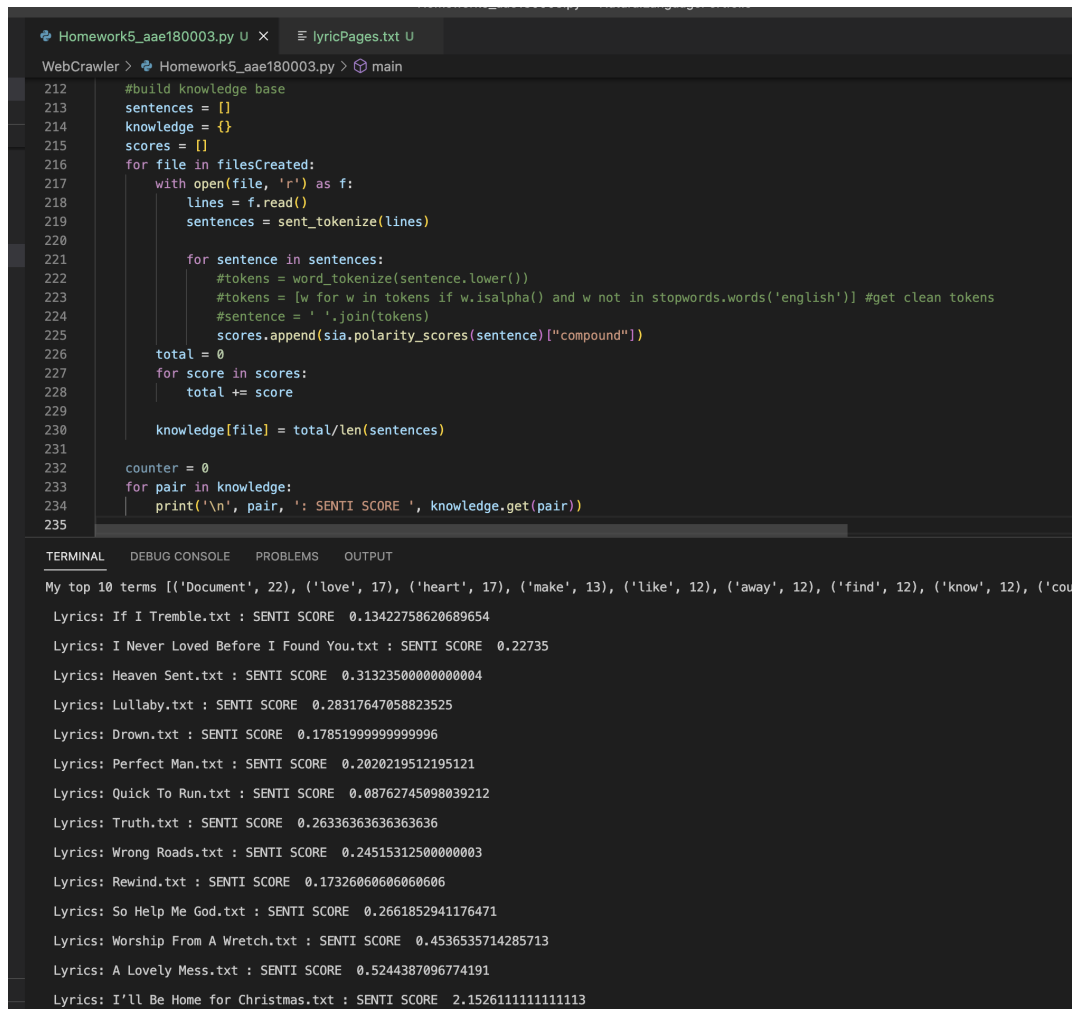


- (1) describe how you created your knowledge base, include screen shots of the knowledge base, and indicate your top 10 terms;
- (2) write up a sample dialog you would like to create with a chatbot based on your knowledge base

(1) It's difficult to choose my top 10 terms based on my knowledge of the domain because the topic I have chosen is song lyrics. The code shows only 1 artist but the url could be changed to a different artist on the same website. For my top 10 I chose the most frequent words which do a moderate job at summarizing what the artist sings about. My 10 terms: 'love', 'heart', 'make', 'away', 'find', 'like', 'could', 'know', 'well', 'back'. My knowledge base is just a dictionary of different songs and their corresponding VADER/nltk sentiment analyzer score. To get the score I take the compound VADER score for every sentence in a song and average them. In the future I can (and should) adjust the knowledge base to have better sentiment scores. Below you'll see the console displaying the knowledge base.



```
Homework5_aae180003.py X lyricPages.txt U
WebCrawler > Homework5_aae180003.py > main
212 #build knowledge base
213 sentences = []
214 knowledge = {}
215 scores = []
216 for file in filesCreated:
217     with open(file, 'r') as f:
218         lines = f.read()
219         sentences = sent_tokenize(lines)
220
221         for sentence in sentences:
222             #tokens = word_tokenize(sentence.lower())
223             #tokens = [w for w in tokens if w.isalpha() and w not in stopwords.words('english')] #get clean tokens
224             #sentence = ' '.join(tokens)
225             scores.append(sia.polarity_scores(sentence)["compound"])
226
227 total = 0
228 for score in scores:
229     total += score
230
231 knowledge[file] = total/len(sentences)
232
233 counter = 0
234 for pair in knowledge:
235     print('\n', pair, ': SENTI SCORE ', knowledge.get(pair))
```

TERMINAL DEBUG CONSOLE PROBLEMS OUTPUT

My top 10 terms [('Document', 22), ('love', 17), ('heart', 17), ('make', 13), ('like', 12), ('away', 12), ('find', 12), ('know', 12), ('coul

Lyrics: If I Tremble.txt : SENTI SCORE 0.13422758620689654

Lyrics: I Never Loved Before I Found You.txt : SENTI SCORE 0.22735

Lyrics: Heaven Sent.txt : SENTI SCORE 0.31323500000000004

Lyrics: Lullaby.txt : SENTI SCORE 0.28317647058823525

Lyrics: Drown.txt : SENTI SCORE 0.17851999999999996

Lyrics: Perfect Man.txt : SENTI SCORE 0.2020219512195121

Lyrics: Quick To Run.txt : SENTI SCORE 0.08762745098039212

Lyrics: Truth.txt : SENTI SCORE 0.26336363636363636

Lyrics: Wrong Roads.txt : SENTI SCORE 0.24515312500000003

Lyrics: Rewind.txt : SENTI SCORE 0.17326060606060606

Lyrics: So Help Me God.txt : SENTI SCORE 0.2661852941176471

Lyrics: Worship From A Wretch.txt : SENTI SCORE 0.4536535714285713

Lyrics: A Lovely Mess.txt : SENTI SCORE 0.5244387096774191

Lyrics: I'll Be Home for Christmas.txt : SENTI SCORE 2.1526111111111113

(2) Initial dialog 1

Hi, I'm Annie, a song lyric sentiment analysis bot . What is your name?

My name is Aiden.

Hi Aiden! Is there a particular artist you'd like me to analyze?

No, not really.

Oh okay, come back next time you want me to analyze song lyrics for you!

Initial dialog 2

Hi, I'm Annie, a song lyric sentiment analysis bot . What is your name?

My name is Aiden.

Hi Aiden! Is there a particular artist you'd like me to analyze?

Front porch Step.

Here is a list of Front porch Step songs analyzed for you:

I'll Be Home for Christmas: SENTIMENT SCORE: 2.15261

I Never Loved Before I Found You: SENTIMENT SCORE: 0.22735

Private Fears in Public Places: SENTIMENT SCORE: 0.48793

This music seems <Category/Feeling> to me.

Is there another artist you'd like me to analyze?

Yes, can you do Maroon 5?

Here is a list of Maroon 5 songs analyzed for you:

...

Is there another artist you'd like me to analyze?

No i'm done

Okay see you next time!

Initial dialog 3

Hi, I'm Annie, a song lyric sentiment analysis bot . What is your name?

My name is Aiden.

Hi Aiden! Is there a particular artist or song you'd like me to analyze?

Can you tell me what a dog is?

I'm sorry I couldn't find that song or artist, try a different spelling or another artist/song.

So you can't analyze a dog?

I'm sorry I couldn't find that song or artist, try a different spelling or another artist/song.

Despacito.

Despacito: SENTIMENT SCORE: .84995

This song seems <Category/feeling> to me.

Is there another artist or song you'd like me to analyze?

No

Goodbye *Computer death*