**HOW WE CREATED OUR KNOWLEDGE BASE:**

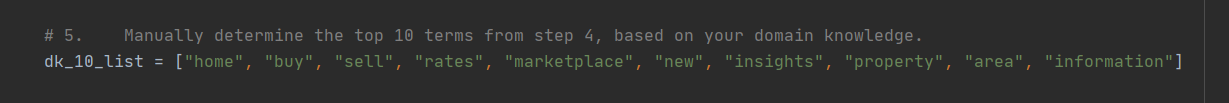
    The technical design of our knowledge base was to include multiple facts about the US housing market written inside of a test string. We then sent\_tokenized the string into a list and from that list created a dictionary. This dictionary was easily modifiable into a pickle dump which now holds our knowledge base to load or do as we please in the future.

Here is a screenshot of our knowledge base:

Text

Description automatically generated

Here is a list of our top ten terms:



We created our knowledge base by combing through all websites that had to do with the recent US housing market. We took our 40 most important words and ran through each of them to find specific facts with the important words included in them. We also ended up trying to emulate a conversation that someone would have with a person that knows everything about the housing market and decided to try and answer those questions with facts.

**SAMPLE DIALOG:**

*Hi, I'm Chatbot, a bot that knows everything about the US housing Market. I love to talk about the recent market! What is your name?*

I'm Zach.

*Hi Zach. What are your main interests in the market today?*

I’m curious about the trending marketplace.

*Great! I have much information on that. Would like to narrow your search or just receive top-trending information?*

Oh, I don't know. What about the best area to buy a home with the best schools?

*According to my sources, the most affordable zip codes with the best schools in the US are 64014, 46060, and 75023. Would you like any more info on these zip codes?*

No thanks. What about the California market?

*Well there has been recently a lot of people moving away from California and going to Texas.*

Really? That’s interesting. Why is Texas becoming a popular place to relocate?

*Dallas, TX has the highest employment rate in the United States. Also, Houston , TX is the fourth largest city in the United by population. Would you like to know more?*

Yes, tell me more about Dallas, TX.

*Sure! 52.9% of Dallas, TX residents are renters vs. the national average of 33%.*

What would that mean if I were to invest in those properties?

*Rental properties more often than not guarantee a steady rate on your investment.*

Wow, that’s very informative. Thanks for the information, goodbye.

*No problem, it was my pleasure. Have a great day!*