***Program:***

The program was developed in Python and is slightly based on the design of my Assignment 2 submission. The main function (called “Frequency\_Indexing), only uses one predefined function from Assignment 2 and that is the “get\_page\_content(url)”. The output of Assignment 2 was saved to a text file, so the URLs needed to access the documents contents required me to read that file first (called “crawled\_urls.txt”). I requested the unique terms as input through the “input()” function rather than as a parameter of the function itself. The hash table is structured like this:

{word:[[value, value] [value, value]] }

Essentially this is a list, within a list, within a dictionary. The putting the list within a larger list was not absolutely necessary, but I found it easier to add values to the key this way. This then saves all of the indexing information related to the Unique Terms given as input by the user into a text file called “index.txt”.

***Unique Terms:***

hydrogen; solar; wind; cell; electricity; economics; carbon; alternative; environmental; non-renewable

***Number of documents indexed by Unique terms:***

1. hydrogen = 172
2. solar = 344
3. wind = 321
4. cell = 129
5. electricity = 357
6. economics = 199
7. carbon = 316
8. alternative = 240
9. environment = 335
10. non-renewable = 57

***Number of Unique Terms found:*** 149607