## **Project**

Notes 1: Consider it as fun part of your learning and don't take it as a burden or assignment with a forced deadline. Do it by yourself.

Notes 2: Do not consult the solutions directly, make sure you first attempt it by yourself and If you are unable to get it correctly than consult the solution.

Note 3: If you feel difficulties in understanding the solutions, post your question in the Q/A section of the course. Do not forget to mention the question number you are querying about.

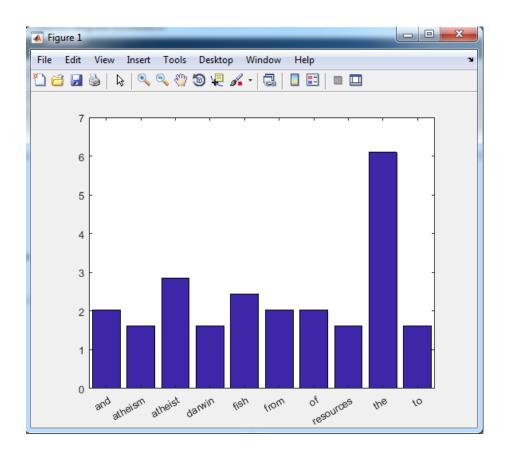
Note 4: If you feel you have some exciting questions, please inbox to me and I will add to the questions list there after review. This will help you fellows to have more practice and fun.

Note 5:	Have Fun

**Q:1.** In this example we are going to do some processing on a text file and then represent the results in graphical using plotting functions. Do the following steps to complete this project.

- Download the file file named as Example\_text.txt (it is attached as a resource to this lecture) and save it on your computer.
- 2. Replace the special characters '.', ',', ':', '/','''' that are present in the text file using a space character. You will need to convert it into the string first for this purpose using the string() function.
- 3. Next, break the string into individual words.

- 4. Find the frequencies of the words in the text file.
- 5. Find a sorted list of words in descending order based on their respective frequencies.
- 6. Create a bar plot of the top 10 most frequently occurring words. On the x-axis we expect the names of the words and on the y-axis we should have the percentage frequencies of the words. (Note: please note that the tabulate() may return a cell array. Cell data type is covered in the later portion of the course. But for now you need to know that when applying the bar() function, the first argument which is in this case is cell needs to be converted to categorical which you can do by calling a function categorical() and the second argument needs to be in numeric format so for that you can convert the cell to numeric of matrix by calling the function cell2mat()). The final output should be something like this



**Enjoy MATLAB**