

# CS 60 254 Data Structures and Algorithms

## *Assignment 1 Due dates (Sept 25 - 27)*

Write a computer program that allows the user to store information about Facebook posts. For each post, the user wants to store the number of likes and the number of comments the post received. The name of the post owner (facebook account name), the size of the post (number of characters in the post), and the date of the post. The date could be string (e.g. "2017\_05\_22" ) or a number (e.g. 20170522).

When the program executes it should ask the user to select one of the following options

1. Display the stored posts
2. Display the first post with a given attribute value (e.g post author = John)
3. Display the current total number of stored posts
4. Store the data of a new post. (*note that all the attributes are required and can not be null*)
5. Delete a post by one the following options (post date, post author).
6. Delete all the stored post.
7. Sort the post based on one of the following post attributes ( number of likes, number of comments, date, or post size)
8. Exit

Notes:

- Your program should only terminate if the user press option **"7 Exit"** otherwise it should continue processing user's requests.
- Select the appropriate data structure to store the post information. Make sure you can justify your selection.
- Use functions to organize your code.
- Make sure that your program does not crash if the user enter invalid data input at any point during the program execution.