CSCI 2320 Lab 1 - Linked Lists

To answer a question, simply type your answer in this document or write/draw them on a separate piece of paper (labeling each answer**). Upload the document with your answers to Blackboard to complete this assignment.**

1. **Understand** and **run** the **ListLinked** code provided to you on the GitHub classroom assignment.
    a. Follow the link provided to you in the Blackboard assignment.
    b. Accept the assignment.
    c. Use git clone to clone the assignment repository to your local machine.
        Below are hints for the commands to run (don't forget to change the path to the correct one for your user or machine)

```
$ cd /c/Users/ptalley2/github-projects/
$ git clone URL
```

    d. Open the Visual Studio project on Windows or create your own project in your environment.
    e. Run and understand the code.

2. Show a representation of data in memory after the initial code is run. `(You can use -> to show that one node is pointing to another, such as 10->20.`

3. **Add these 5 inserts and a display to the main function, but do not run it.**
    insert(20,2)
    insert(70,5)
    insert(100,0)
    insert(10,5)
    insert(110,6)
    display()

4. Show a representation of what you think the data will look like in memory. `(You can use -> to show that one node is pointing to another, such as 10->20.)`

5. Run the code with the new inserts and tell me if your guess was correct. If not, did you figure out why?

6. **Add 5 erases and a display to the main function, but do not run it.**
    erase(3)
    erase(5)
    erase (4)
    erase(2)

erase(1)
display()

7. Show a representation of what you think the data will look like in memory. (You can use -> to show that one node is pointing to another, such as 10->20.

8. Run the code with the new erases and tell me if your guess was correct. If not, did you figure out why?

9. List each method in the class and its Big O() notation.

10. To complete this assignment,
    a. Use git bash or terminal to add, commit and push the changes to main.cpp to GitHub.
    b. Submit the document with your answers to Blackboard.

    Below are hints for the git commands to run (don't forget to modify for your user/path)

```
$ cd /c/Users/ptalley/github-projects/dslab1-usergitusername
$ git add main.cpp
$ git commit –m 'finishing lab'
$ git push
```