Assignment #6 – C-style Linked Lists
Due: Friday, 06/07/13, 11:59pm

Begin by reading Chap. 17 on linked lists in you book. To begin getting ready for CS 261, you will write a C program that fills and sorts a linked list of integers. Since you are using C, you need to define a struct for the nodes in your list, which contain an integer and pointer to the next node in the list. Make sure your program compiles using gcc!!!

```c
struct node {
    int number;
    node *next;
};

... struct node *head;
```

Write a C program that asks the user for an integer value until he/she no longer wants to continue. Add each integer entered by the user to the linked list, and then sort the integers in the linked list by rearranging the nodes in the list to be sorted in ascending order. For example:

Would you like to enter an integer (y for yes/n for no)? y
Enter an integer: 100

Would you like to enter an integer (y for yes/n for no)? y
Enter an integer: 30

Would you like to enter an integer (y for yes/n for no)? y
Enter an integer: 50

Would you like to enter an integer (y for yes/n for no)? y
Enter an integer: 10

Would you like to enter an integer (y for yes/n for no)? n

Your integers in ascending order are:
10 30 50 100

In order to submit the files, you will be creating a bzipped tar ball. In order to do this, you will use the following command, adding all the source files to the end of the command:

```
tar -cjvf cs162_hwx_username.tar.bz2 file1 file2 file3...
```

This tar ball (replacing username with your ENGR username), and only this tar ball, will be submitted via TEACH.