Program #5: Generic List

Modify your List class that you submitted for Program #4 to support generics such that it can store not just integers, but other types such as floats and characters.

Make a copy of your version of List.java, modify it to satisfy the new tests, and then submit the new improved version.

- 1. For this assignment, you will be provided with two files:
 - ListTest. java contains the main function. You may NOT modify this file!
 - ListTest.out contains the output from my implementation of the list class. You would be wise to ensure your output is **EXACTLY** the same (That includes spacing and formatting).
- 2. This assignment involves changing about **eight** lines in the node class and **twenty-two** lines in the List class so I expect you to complete it in under 30 minutes. But as some of you might have learned from Program #4, you do not want to wait till the last 30 minutes before it is due to start it.
- 3. Compiling ListTest.java should automatically use your List.java file (assuming they are in the same directory). After successful compilation, running the produced executable file SHOULD produce output identical to ListTest.out.
- 4. Feel free to redirect the output to a file of your choosing, and then compare the two files (i.e. ListTest.out, and your output file) using the command prompt with commands such as diff, comm, fc, or any other you deem appropriate)

For example, once completed, the three commands below should ${\bf NOT}$ produce any output.

Linux:

```
javac ListTest.java
java ListTest > myOutput
diff ListTest.out myOutput
```

Windows:

```
javac ListTest.java
java ListTest > myOutput
fc ListTest.out myOutput
```