7.2 - A Little Bit of Lab5 (5 points)

1. Refer to the full directions for Lab5 if you need to: https://docs.google.com/document/d/1Yh8zNchxV2V3-8jg4dg6PvJIymOa4WivgNeD0dAhdvk/edit?usp=sharing

2. Write a header file named `linked_list.h`. The header file should define a `struct` for a linked list node that contains two members: an `int` named `value` and a pointer to a node named `next`. `typedef` this `struct` to type `Node`. `linked_list.h` should also declare the following functions:

```
Node* insert(Node *p, int value);
void print_list(Node *p);
Node* free_list(Node *p);
Node* delete(Node* p, int value);
```

   Be sure to include a **header guard**!
3. Create a C file named `linked_list.c` and complete the `print_list()` function.

   a. `print_list()`. This function should take the head as an argument and print the contents (`int` values) of the list, from head to tail. For example, `print_list()` on the linked list in the diagram above would print:
   5 10 20 1
   If the list is empty it should print:
   `[empty list]`
   The `print_list()` function should print a newline character at the end.

Turn in your code to moodle in `lab5.2.tgz`
It should have:
- `linked_list.h`
- `linked_list.c`
- `lab5.txt` (that has your name as the driver)

There is a test `main()` for you in:
`/home/msarris/csci235/lab5/test7.2.c`

BONUS:

Write a script that will:
- compile your code
- run your code and redirect the output to a file
- check that file is the same as a file containing the correct answers
- print a message congratulating or shaming your code

Turn your script in with your lab5.2.tgz