

CS 220, Fall 2017  
Assignment 5 – (100 points)  
**Due date: 05 Oct 2017, 11:59pm.**

## Instructions

- Answer the questions individually. Group effort is not allowed.
- Solutions must be committed to your respective repositories on github.
- For this assignment, **you are not allowed to use any library functions not declared in `stdio.h`.**
- Ensure that your code runs on `remote.cs.binghamton.edu`.
- Prototypes must be provided for all functions within the header file `define.h`.
- Code must be appropriately commented.
- Useful resources:
  - Common linux commands: <http://www.informit.com/blogs/blog.aspx?uk=The-10-Most-Important-Linux-Commands>
  - <http://c-faq.com/>
  - <https://cdecl.org/>

## Questions

1. (100 points) You are to implement a function: `Node *my_reverse(Node *head)` that reverses a list beginning at `Node *head`. The return value of this function is a pointer to the head of the newly-reversed linked list. A linked list is a collection of Nodes that are connected to each other using pointers. The last node in a list points to `NULL`.

The following definition of a Node is provided in `define.h`, and may not be modified in your submission:

---

```
struct _Node {
    union {
        int n;
        char c;
    } val;
    void *ptr;
    int var;
};
typedef struct _Node Node;
```