

CS 161 Recitation

Take Home Quiz #8

(4pts) If 2 is passed into `recPrint()` and `recPrint2()`, trace and give the output for each function in an otherwise complete program:

```
void recPrint(int num){
    if (num < 0)
        return;
    recPrint(num - 1);
    cout << num;
}
```

```
void recPrint2(int num){
    if (num < 0)
        return;
    recPrint2(--num);
    cout << num;
}
```

(2 pts) Answer the following questions.

- Where is static memory located?
- Where is dynamic memory located?

(2 pts) Answer the following questions.

- If you want to get to the first value in an array, what index number are you accessing?
- If 'len' is equal to the current size of your array, what is the index of the last value?

(2 pts) Declare an array of 5 chars on the stack:

Extra Credit: (2 pt) Allocate and deallocate a 1D array of size `x` on the heap without any memory leaks.