CS 161
Intro to CS I

2d arrays and Command-Line Arguments
Odds and Ends

- Demo Assignment 4
- Assignment 5 questions
- Any other questions???
Static 2-D arrays...
Passing a 2-D Array (Static)

```cpp
int main() {
    int array[5][5];
    ...
    pass_2darray(array);
    ...
}
void pass_2darray(int a[5][5]) {
    cout << "Array at zero: " << a[0][0] << endl;
}
OR
void pass_2darray(int a[][5]) {
    cout << "Array at zero: " << a[0][0] << endl;
}
```

OSU Oregon State University
#include <iostream>

using namespace std;

int main(int argc, char *argv[]) {
    cout << argc << endl; // count for number of args, default is 1
    cout << argv[0] << endl; // c-style string
    cout << argv[0][0] << endl; // 1st character in 1st string

    // before accessing the second command-line argument, make sure the
    // user supplied it and it was a 1 or 2 for number of players
    if(argc==2 && (argv[1][0]=='1' || argv[1][0]=='2'))
        cout << argv[1] << endl;
    else
        cout << "error" << endl;

    // how do I create a 2-d array on stack?

    // how do I print address of pointer to 2-d array?

    // how do I print address of the 1st element in 1st row?

    // how do I print address of the 1st element in 2nd row?

    // print contents of 2nd element in 2nd row
```
flip2 ~/cs161/private 155% g++ 2d.cpp
flip2 ~/cs161/private 156% a.out
1
a.out
a
error
flip2 ~/cs161/private 157% a.out 2
2
a.out
a
2
flip2 ~/cs161/private 158% a.out 1 2
3
a.out
a
error
flip2 ~/cs161/private 159%  
```