

Agenda / Learning Objectives:

1. Run the following command and extract lab21.tar in your venus account (note the **dot**):

```
cp ~ctse/cs111/lab21.tar . ; tar xvf lab21.tar
```

2. Review:

- a. Recursion common pitfall: segmentation fault (./SegmentationFault)
- b. Variable Scope (./ScopeError)
- c. [vi cheat sheet](#)

3. Check out how to use =i in vi (vi vi_indentPractice.cpp)

4. Practice recursion:

- a. Figure out the console outputs:
 - i. prac2_p47.cpp
 - ii. prac3_p37.cpp
- b. Write the recursive function with 2 input parameters:
 - i. sumGaps.cpp

(You can check the answer in ~ctse/cs111/sumGaps.cpp after 12pm)

5. Understand 1D array:

Provide the output of the given line in the blanks below.

```
#include <iostream>
using namespace std;
int main() {
    int a[10] = {1, 6, 4, 2, 8, 4, 1, 3, 2, -2};
    cout << a[0] << endl; //(1) _____
    cout << a[3] << endl; //(2) _____
    cout << a[5] << endl; //(3) _____
    cout << a[9] << endl; //(4) _____

    for (int i = 0; i < 10; ++i)
        a[i] += i;
    cout << a[1] << endl; //(5) _____
    cout << a[2] << endl; //(6) _____
    cout << a[6] << endl; //(7) _____
    cout << a[8] << endl; //(8) _____
    return 0;
}
```