Basics of Pointers

- Pointer operators
  - * - dereference
  - & - address of
  - -> - same thing as

```c
int set [SIZE] = { 5, 10, 15, 20, 25, 30, 35, 40 };
int *num;
for ( num = set; num < &set[SIZE - 1]; num++)
  cout << *num << " ";
```
Basics of Pointers

- Difference between pointer and array?
  - Use as pointer
  - Use as array

```cpp
class = new int [ SIZE ];
delete [ ] class;
```

Dynamically Allocation a 2D Array

```cpp
char **array = new char *[10]; // allocate 1st dimension
for ( int row = 0; row < 10; row++ )
  array[row] = new char [8];

- Why the double pointer?
  - array is a pointer-to-pointer-to-char

- Once this is done, we access the array as with any two-dimensional array: array[i][j]
```