Advanced Output Section 3.7

- How can we force output to look a particular way?
  - o Precision of numbers
  - o Spacing around output

```
Here are some floating point numbers:
       72.0
       72.00
       72.000
Here is a table of data:
       4    cat     15
      100    6      2.1
```

Outputting with Spacing

```cpp
#include <iostream>
#include <iomanip> //New Library!
#include <string>

using namespace std;

int main()
{
  string name = "cs150";
  int integer = 42;

  cout << setw(6) << name << setw(6) << integer << endl;
  cout << setw(4) << integer << endl;

  return EXIT_SUCCESS;
}
```

Setw

- Setw is not *sticky*
  - o you must specify it every time

```cpp
int integer = 42;
cout << setw(6) << integer << integer << endl;

//output?
```

Practice

- Write a program segment that allows the user to input two integer values. Display both numbers as shown below, always displaying the smaller number first.

```
Please enter two numbers: 100 9
The numbers are:
                9
              100
```