C++ Notes Mrs. Alano

3 ways to put info on separate lines

```
cout << "Hi";
cout << "there";

cout << "Hi" << endl << "there";

cout << "Hi\nthere";</pre>
```

\n is considered an **escape sequence**. An escape sequence is a sequence of characters in which the first character serves only to "escape" from the usual meaning of the second character. Other commonly used escape sequences are \t for Tab, \" for a double quote, and \' for a single quote. To actually show a backslash, use \\.

A major feature of object-oriented languages is the ability to create your own complex data types. C++ supports 2 ways to create your own complex data types: structures and classes.

We will start with the simpler of the 2 – **structures** 

```
struct Student //struct required to be lowercase
                //common practice for structure names to be uppercase
{
     int creditHours;
     double gpa;
} ;
                //the only time you will see a ; after a }
int main()
     Student s1; //creates space in memory for an int and double
                      //creates another space in memory for an int and
     Student s2;
                      //double
     s1.creditHours = 12;
     s1.gpa = 3.6;
     s2.creditHours = 15;
     s2.gpa = 3.8;
     cout << "The first student has " << s1.creditHours << " credit</pre>
     hours with a " << s1.gpa << " gpa" << endl;
     cout << "The second student has " << s2.creditHours << " credit</pre>
     hours with a " << s2.gpa << " gpa" << endl;
}
```