Lab 2 - wb 04/11/13

This week will cover if statements and switches. Follow the demos below to cover this.

If Statement Demo Part 1

Open visual studio or prefered programming tool, create a project and then add a main.cpp file.

Conditions in c++ can be **==, >, <, >=, <=**

```
#include <iostream>

using namespace std;

int main()
{
    int age;
    cout<<"How old are you?"<<endl;
    cin>>age;

    if (age < 30)
    {
        cout<<"You are Young! :)";
    }

    if (age>=30)
    {
        cout<<"Your a bit old aren't you... ";
    }

    cin.ignore();
    cin.get();


    return 0;
}
```

If Statement Demo Part 2

This part of the if statement demo continues to show IF and **ELSE**
Logical operators in c++ are (**AND) &&**, (**OR) ||** , (**NOT) !**

```
#include <iostream>

using namespace std;

int main()
{
    char chips;
    char cheese;
    cout<<"Do you like Chips? (y/n)"<<endl;
    cin>>chips;
    cout<<"Do you like Cheese? (y/n)"<<endl;
    cin>>cheese;
    cout<<endl;

    if (chips =='y' && cheese == 'y')
    {
        cout<<"You will really like cheesy chips then!";
    }
    else
    {
        cout<<"Oh, never mind.... ";
    }

    cin.ignore();
    cin.get();


    return 0;
}
```

Switch Demo
This demo shows how to create switches.

```
#include <iostream>

using namespace std;

int main()
{
   int choice;
   cout<< "Pick a number between 1 and 10: ";
   cin>>choice;
   cout<<endl ;

   switch(choice)
   {
    case 1: case 2: cout << " Pick another number...!"; break;
    case 3: cout << " Hello there!"; break;
    case 4: cout << " Good morning"; break;
    case 5: case 6: cout << " Good evening"; break;
    case 7: cout << " I don't like that number, leave me alone"; break;
    case 8: case 9: case 10:
    cout << " You like high numbers don't you"; break;
    default: cout << " That input wasn't what I asked for!";
   }

    cin.ignore();
    cin.get();

    return 0;
}
```

You can use switches with Chars as well. Just like this " case 'a' : "

Have A Go - Test Your Knowledge!

Challenge 1
Output a menu to the user and ask them to choose an option (a,b,c / 1,2,3), output something based on what they input.

Try this using both if statements and switches.

Challenge 2
Ask the user to input a number between 1 and 100. If it is 50 or under then times it by 2 and output the result, otherwise divide it by to and output the result.