

Counter while Loops

Question 2.

```
/*This program converts miles to kilometers
and prints a table up to the user entered miles.
It uses a while loop with a counter to
convert 1-n(user enters the value of n) miles to
kilometers.*/

#include <iostream>
using namespace std;

int main() {
    double kilometersPerMile = 1.609; // 1 mile = 1.609 kilometers
    int miles=0, count=1;

    cout << "Enter the number of miles between 0 and 20: ";
    cin >> miles;

    while ((miles <= 0) || (miles >= 20))
// Notice that there is no semicolon after the Boolean Expression.
    {
        cout << "Enter the number of miles between 0 and 20: ";
        cin >> miles;
    }

    cout << "Miles" << "\t" << "Kilometers\n";
    while (count <= miles)
//The loop repeats from count=1 to count=miles.
    {
        cout << count << "\t" << count*kilometersPerMile << endl;
        count++;
    }

    return 0;
}
```