

```
/*
Author: Aryan Bhatt
Course: CSCI 136
Instructor: Genady Maryash
Assignment: HW 5.6
*/
```

Rearrange

```
double read_double(string prompt) {
    cout << prompt << ": ";
    double value;
    cin >> value;
    return value;
}

int main() {
    double price = read_double("First item");
    price = price + read_double("Next item");
    double rate = read_double("Tax rate in percent");
    double tax = price * rate / 100;
    cout << "Amount due: " << (price + tax) << endl;
}
```

Code Checks 1, 2, and 3

```
#include <string>
#include <iostream>
using namespace std;
```

```
int find_occurrence(string str, string ch, int n);
string replace_at(string str, int position, string replacement);
```

```
/**
Replaces all pairs of straight quotes with curly quotes.
@param str the string to process
@return str with adjacent pairs of straight quotes changed to
curly quotes
*/

string smart_quotes(string str) {
    string result = str;
    string left_quote = "\"";
    string right_quote = "\"";
    while (find_occurrence(result, "\"", 2) != -1) {
        result = replace_at(result, find_occurrence(result, "\"", 1), left_quote);
    }
}
```

```

        result = replace_at(result, find_occurrence(result, "\"", 1), right_quote);
    }

    return result;
}

```

/**

Finds the nth occurrence of a given character in a string.

@param str the string

@param ch the character to search

@param n the occurrence count

@return the position of the nth occurrence of ch in str, or -1
if ch doesn't occur n times.

*/

```

int find_occurrence(string str, string ch, int n) {
    int count = 0;
    for (int i = 0; i < str.length(); i++) {
        if (str.substr(i, 1) == ch) {
            count++;
            if (count == n) {
                return i;
            }
        }
    }
    return -1;
}

```

/**

Replaces a character of a string at a given position.

@param str the string where the replacement takes place

@param position the position of the character to be replaced

@param replacement the replacement string

@return str with the character at the position changed to
the replacement string, or the original string
if position was not valid.

*/

```

string replace_at(string str, int position, string replacement) {
    if (0 <= position && position < str.length()) {
        return str.substr(0, position) + replacement +
            str.substr(position + 1);
    }
    else {
        return str;
    }
}

```

}
}