

Computer Science 1081 – Assignment #01

Program #1 (Id: 165324)

Enter Program 1-1 on page 9 of the textbook (also shown below). Do not change any of the string literals. Test the code with your own input samples to see if you can find any quirks in how the program interacts with the user.

```
#define AUTHOR "Matthew Sanders"
#define ASSIGNMENT 165324
#include "selfChecker.h"

/* This program calculates the user's pay. */
#include <iostream>
using namespace std;

int main() {
    double hours, rate, pay;

    /* Get the number of hours worked. */
    cout << "How many hours did you work? ";
    cin >> hours;

    /* Get the hourly pay rate. */
    cout << "How much do you get paid per hour? ";
    cin >> rate;

    /* Calculate the pay. */
    pay = hours * rate;

    /* Display the pay. */
    cout << "You have earned $" << pay << endl;
    return 0;
}
```

Program #2 (Id: 165435)

Write a program that will ask the user to enter their maximum credit and credit already used. The program should then calculate their total remaining credit. Use the source code shown below, adding code as necessary without modifying the existing code.

The following messages should be used with interfacing with the user:

"What is your maximum credit?"

"How much credit have you already used?"

"Your remaining credit is \$"

```
// This program calculates the user's remaining credit.
#include <iostream>
using namespace std;

int main()
{
    double maxCredit, creditUsed, remainingCredit;

    // Get maximum credit.

    // Get the credit already used.

    // Calculate the remainingCredit.
    remainingCredit = maxCredit - creditUsed;

    // Display the remainingCredit.



---


    return 0;
}
```

Program #3 (Id: 165546)

Write a program that will calculate the total for a retail sale. The program should ask the user for the retail price of the item being purchased and the sales tax rate. Once these items have been entered, the program should calculate and display the sales tax for the purchase and the total of the sale.

The following messages should be used with interfacing with the user:

“Please enter the retail price:”

“Please enter the tax rate:”

“The sales tax is: \$”

“The total price is: \$”

Hint: Copy and modify the previous programs! A good variable definition statement would be:

double price, taxRate, salesTax, total;

Hint: the tax rate will be entered as if it was [value]%, this means you need to modify the value in order to use it in a numeric calculation.