

## IT210 Business Applications with C++

### Program Assignment 2

### Credit Card Interest Calculator

#### Purpose

Write a C++ program that will calculate the interest on **one or more customers'** credit cards unpaid balances using the average daily balance.

#### Program Input

The standard input for this program will be:

- Customer's first and last name ;
- Credit card number (*echo the number and have customer verify it is correct, reenter if incorrect*)
- Balance shown in the bill (*netBalance*)
- Payment made (*payment*)
- Days in the billing cycle (*d1*)
- Number of days payment made before billing cycle (*d2*)

Calculate the average daily balance based on the equation given below:

$$\text{averageDailyBalance} = (\text{netBalance} * d1 - \text{payment} * d2) / d1$$

$$\text{interest} = \text{averageDailyBalance} * \text{APR} / (100 * 12)$$

where APR depends on the average daily balance as shown below

*averageDailyBalance* < \$100 APR = 5%

*averageDailyBalance* between \$100 and \$1000 APR = 10%

*averageDailyBalance* > \$1000 APR = 15%

**Your program's input output must be identical to the sample screenshots provided.**  
**You are required to use two loops ( a while loop and a do while loop) and a nested if.**

#### Submission Requirements:

Submission requirements are listed under Program Submission Requirements. You are required to include a flow chart, a program narrative describing how your program works, input screenshots, source code with comments (font size 12, word wrap and line numbers in margin selected), output screenshots with white background and black text, with required files on the flash drive