

Program 1 - **Credit Card**
Comp 170
30 points

Write a C++ program that will calculate the monthly finance charge and balance of a credit card given the initial balance, the credit card's APR, the monthly amount charged to the card, and the monthly payment made on the card.

The finance charge (F/C) is computed as the account balance times the MPR before the month's charges or payments are made.

Your program should produce output **exactly** like the example below. The program stops computing once the credit card has been paid off (balance less than or equal to 0).

```
Initial balance? 1000
Interest rate? 12.5
Monthly charge? 50
Monthly payment? 250

Month      F/C      Balance
  1        10.42     810.42
  2         8.44     618.86
  3         6.45     425.30
  4         4.43     229.74
  5         2.39       32.13
  6         0.33       0.00

Your Last payment was 82.46
```

Any positive dollar amount, interest rate, monthly charge, or monthly payment may be entered by the user.

To create the aligned columns, you will need to use the `setw` function in the `iomanip.h` library. There are 5 spaces between "Month" and "F/C" and "F/C" and "Balance".

* If for some reason the credit card balance cannot be paid off, your program should report: "**Card cannot be paid off.**" and not produce a table.

Turn in your program (CreditCard.cpp) **on Easel.**

Rubric

Points	Criteria
6	Displays " Card cannot be paid off. ", when it can not be.
3	Input matches format of example given in assignment.
2	Table header matches example.
4	Table format matches example.
9	Table values are correct.
6	Last payment is correct and is formatted as shown in example.