# Purpose

This program will calculate the interest and average daily balance given an input card database, in the form of a plain text file: input4.txt, and will log the information to foutlog4.txt

# Procedures

Simply run the program and go. As long as a properly formatted input3.txt is located in the same folder as the executable, it will run without any user interaction.

# Preprocessor Directives

* #include <iostream> iostream is the standard input/output library
* #include <iomanip> iomanip is the standard manipulation library
* #include “rslib.h” rslib is my custom header that defines the Heading of the program
* #include “rsfunct.h” rsfunct is my custom header that prototypes functions for the average daily balance calculator
* #include “bank.h” bank.h prototypes functions that are specific to the operations of this Bank

# Function Prototypes

## Rsfunct.h

### These functions can be found in rsfunct.cpp

* void printInstructions() – this displays the instructions to the end user on how to complete this program
* bool doesFileExits(bool, char\*) – This determines if the file can be found. The Boolean determines if we want the answer to fin or fout

## Rslib.h

### These functions can be found in rslib.cpp

* void buildHeader(int, int, int, int, int, int, char\*) – Builds our welcome header. Program Number, Assignment Number, and when it’s Due. Takes a char array for the output log
* void buildLine(char, int, char\*) – Builds a separator line of the requested character for the requested length, then inserts a newline character at the end. Takes a char array for the output log
* void setDueDate(int, int, int) – Sets the due day, month, and year

## Bank.h

### These functions can be found in bank.cpp

* float getAPR(float) – This gets the APR in decimal format (for example, 0.15 instead of 15%). Multiply the return by 100 to get a human-readable % APR
* float getInterest(float) – This returns the amount of interest owed, based on the user’s Average Daily Balance
* void readCustomerData(char\*, char\*) – This takes the requested input file, as well as output file, and displays a simple table to the administrator showing all the customer accounts. Additionally, it tallies up the total amount of interest owed by everyone. Lastly, it logs all of this to the output log.
  + [BUGFIX] THIS TIME, compared to 3, the output log shows up as expected.

# Non-Prototyped Functions used:

## int main()

Purpose: this is the function that starts the program. Calls to all other functions, defined above in the Function Prototypes section are called here. As long as a properly-formatted input4.txt is in the same folder as the executable, it will run without user interaction