Massey University

159.234 Assignment 1-part 2

Deadline:	**Anytime before** Sunday, 20st August 2017, 12-noon
Evaluation:	10 marks – which is 5% of your final grade
Late Submission:	**Because of Stream issues the submission date is extended with no penalties to Sunday 27 August 2017-noon. Assignments submitted after 27 Aug 2017 will get 0 marks.**
Teams:	The assignment can be done individually or in pairs (of at most 2 students)
Purpose:	Practice with C++ input and output, basic class constructs, overloading.

Problem to solve.
Write a program that simulates a very simple ATM (Automatic Teller Machine). Write all your code in a single file. Name your program a1p2.cpp.

Requirements:
•Solve the problem from Assignment 1 part 1 using classes instead of structures.
You should overload the output operator for all classes you designed for this assignment.
You may use raw pointers and dynamic memory allocation for this assignment.

•Your program should be organized as follows:

i) First: header comments --including the names and ID of all authors of the solution submitted for marking, assignment number, what the program does and any other issues you think we should be aware when marking your solution.
ii) Next: all included files, and const global variables-if
any iii) Next for each class:
a) class listing (i.e. what would go into the class' header file),
b) Next: class implementation (i.e. what would go into the class' cpp file)
iv) Next the global functions prototypes
v) The main function definition
vi) The global function implementations

Please be aware that for marking we will use the sample input files as given in the assignment but we will also use input files that will be different from the sample input files. The files will use similar formatting.
•In order to clarify what type of input checking is required please note that you can assume that
a) each line in acct.txt has 2 numbers (an integer and a real value) and
b) tranz.txt has, after the first two lines of text, each line consisting of three values: an integer a character and a real number.

Hand-in: Submit a1p2.cpp electronically using STREAM.

Miscellaneous:
1.The program must be your own work. Please be aware that you might be asked to explain to your lecturer how your program works. If you cannot explain it, then it is not yours and you will get 0 marks for that assignment. Attributing someone else's work as your own is plagiarism, and it is a violation of Massey University policy. We might file an official complaint against any student who we believe has committed plagiarism.
2.Marks will be allocated for: correctness, completeness, use of C++ constructs presented in class/tuts, simple and clear solution, good documentation, and structured output display

(on screen).
3.Using goto, non-constant global variables or C-like I/O constructs (i.e printf, fprintf, scanf, FILE*, etc) is not allowed and it will be penalised. Only const global variables are allowed. Do not use std::vector or other STL tools that were not presented in lectures/tutorials.
4. Programs that do not run or do not compile in the (Albany) labs, using gcc(SciTe), get 0 marks.
5.Suspicious similar solutions will all get 0 marks-see also point 1 above.
6.Write YOUR ID NUMBER(S), and YOUR FAMILY NAME(S) first, assignment number, what the program does at the beginning of the file you send electronically and at least comment each function.
7.When working in pair, send one solution file per team.
8.The assignment will be discussed on Thursday lecture before the assignment is due.

If you have questions about this assignment, ask the lecturer before the assignment is due.