



CSE 100, CIDSE
Arizona State University, ASU Online
Lab 11: 10 Pts

Pre-Lab:

- Design the solution to following problem. You can represent your design using a flow-chart and (or) pseudo-code. Following the problem solving approach discussed in the first week of the class.
- Submit a copy of your design with the lab as a PDF document

Lab: Problem Solving: Use appropriate loop construct (for, while, or do while)

Write a program that calculates the balance of a savings account at the end of a three month period. It should ask the user for the starting balance and the annual interest rate. A loop should then iterate once for every month in the period, performing the following:

- A) Ask the user for the total amount deposited into the account during the month. Do not accept negative numbers. This amount should be added to the balance.
- B) Ask the user for the total amount withdrawn from the account during that month. Do not accept negative numbers or numbers greater than the balance after the deposits for the month have been added in.
- C) Calculate the interest for that month. The monthly interest rate is the annual interest rate divided by 12. Multiply the monthly interest rate by the average of that month's starting and ending balance to get the interest amount for the month. This amount should be added to the balance.

After the last iteration, the program should display a final report that includes the following information.

- Starting balance at the beginning of the three-month period
- Total deposits (money amount) made during the three month period
- Total withdrawals (money amount) made during the three month period
- Total interest posted to the account during the three months
- Final balance .

Submit your Lab11.cpp to the blackboard