Design/Testing document

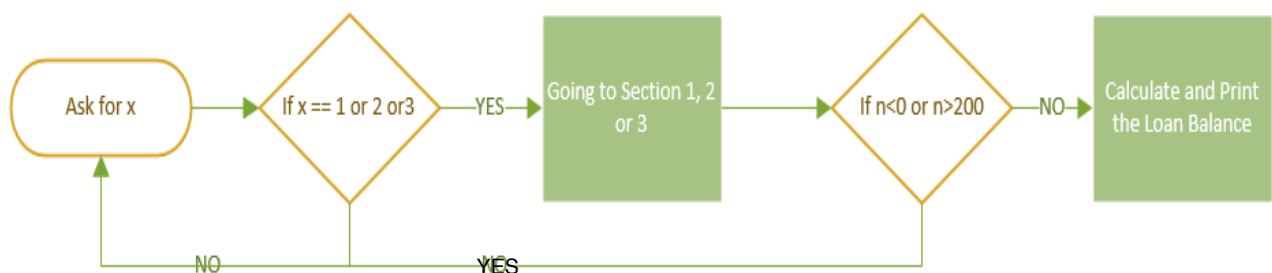**Problem Statement:** Write a C++ program that continues to ask the user for i,n,t,x,r,gv,P and C

test scores. These test scores should range from (0, +inf). We will include:

- Ask the user for interest rate, year and goal value.

- The range should be 0 to positive infinity.

- Print an error message if the number is not in this range, and re-prompt the user for

  another number.

- After receiving good test scores, then calculate the average and output it to the screen.

Understanding the problem:

This problem is asking me to few value (i,n,t,x,r,gv,P and C) which represent interest rate, years ,

years, choice, interest rate, goal value, initial investment and cash flow amount. The range

should be 0 to positive infinity. After the user enters a valid real numbers, the program will

return to the main menu.

Devising a Plan/Design:

Testing:

Value	Expected	Actual meet expected
x = 0	Print:"Invalid selection." And return to the main menu.	YES
x = -1	Print:"Invalid selection." And return to the main menu.	YES
x = 1.5	Print:"Invalid selection." And return to the main menu.	YES
n (years) = 5235324523	Print:"input value invalid." And return to menu.	YES
n = -5	Print:"input value invalid." And return to menu.	YES
Input: P = 1000.0100111 Output: FV= 2011.38	Remain 10th decimal place as 1000.01	YES
P = - 1.0000001	Print:"input value invalid." And return to menu.	YES