

Programming Exercise 8.4

Password-protected Mortgage Calculator, v.2.0

Purpose. Learn how to use a function to enhance a program, by adding one to an existing program.

Requirements. Rewrite Exercise 8.3's `secureMortgageCalculator1.cpp` program, naming the new program `secureMortgageCalculator2.cpp`. Limit the user to 3 incorrect password entries. Exit the program if the correct password is not entered after 3 tries. Think about it -- the function will have to tell main that either a valid password got entered in 3 tries, or not. You decide on the exact wording of the prompts and the return type for the function.

Program I/O. Input: a password from the console keyboard, and then two mortgage calculation inputs. Output: An "invalid" message for each incorrect password entry, then the mortgage calculation output, unless 3 invalid passwords were entered.

Examples. Here's what the output should look like, with user input in blue:

```
Enter the password: 123
INVALID
Enter the password: ABC
INVALID
Enter the password: xyz123
INVALID
```