README

This code represents a banking application called Airgead Banking App. The app allows users to input their initial investment amount, monthly deposit, annual interest rate, and the number of years they want to calculate the investment growth for. It then displays year-end reports showing the balance and earned interest at the end of each year, both with and without additional monthly deposits.

The code handles user input validation for double and integer values and ensures that invalid inputs are handled properly by displaying error messages and allowing the user to try again. It also formats the output to display currency values with proper precision.

Some strengths of the code include the modular structure of the functions, making it easy to understand and maintain. The code also provides clear instructions to the user and validates their inputs effectively.

One possible enhancement could be to add more error handling for cases where the user enters negative values for investment amount, monthly deposit, or annual interest. Additionally, input validation for the number of years could be improved to handle non-positive values.

The most challenging part of the code could be the formatting of the year-end reports to display the values in a neatly aligned table. This was achieved by using stream manipulators, such as ‘setw()’, to set the width of the output fields.

By working on this project, you gain skills in input validation, formatting output, and modular programming. These skills are transferable to other projects that involve user input handling, data processing, and generating reports.

To make the program maintainable, readable, and adaptable, the code uses meaningful variable and function names, follows a consistent coding style, and includes comments to explain the purpose of each function and section of code. The code is structured in a way that makes it easy to modify or add new features if needed.