

Pseudocode for Airgead Banking App
June 9, 2024

1. Initial Display Screen

- Prompt the user for the initial investment amount
- Store the initial investment amount
- Prompt the user for the monthly deposit amount
- Store the monthly deposit amount
- Prompt the user for annual interest rate
- Store the annual interest rate
- Prompt the user for number of years for the investment
- Store the number of years
- Display all input values back to user
- Continue by pressing any key

2. Calculate and display the year-end balance WITHOUT additional monthly deposit

- Clear previous data in the vector storing year-end data WITHOUT deposits
- Initialize total amount to the initial investment
- Loop through each year from 1 to number of years
 - Calculate yearly interest as 'Balance' * (annual interest rate / 100).
 - Add yearly interest to the current 'Balance'
 - Store the year-end balance
 - Store the year-end earned interest
- Display the year, balance at end of the year, and the interest earned that year

3. Calculate and display year-end balance WITH additional monthly deposits

- Clear previous data in the vector storing year-end data WITH deposit
- Loop through each year from 1 to number of years
 - Initialize variable 'YearlyInterest' to 0
 - Loop through each month from 1 to 12
 - Add monthly deposit amount to 'Balance'
 - Calculate the monthly interest as 'Balance' * (annual interest rate / 100 / 12)
 - Add the monthly interest to 'Balance'
 - Add the monthly interest to 'YearlyInterest'
 - Store the year-end balance
 - Store the year-end earned interest
- Display the year, year-end balance, and year-end earned interest

4. Allow the user to test difference values or exit

- Display a prompt asking if the user wants to test different values or exit program
- Read the user's choices
- If the user chooses to test different values
 - Repeat steps from the initial display screen section

Repeat steps from the calculate and display year-end balance without additional monthly deposits section

Repeat the steps from the calculate and display year-end balance with additional monthly deposits section

-If the user chooses to exit

Display goodbye message

End the program