

Financially Literacy Project - Kayla Fortson

The purpose of this program is to compare the financial choices' outcomes between two individuals: Financially Literate (FL) and Non-Financially Literate (NFL). Both individuals start with the same stats: \$5000 in savings, \$0 in checking, \$52500 in debt, \$0 mortgage, 0 years in debt, 0 years rented, \$0 debt paid, and false to owning a home. They both have the same income of \$20,700 (checking) and \$13800 (savings per year). Over the course of 40 years, the program simulates rent, mortgage, debt payments, and saving placements. Key differences involve: FL placing savings in a mutual fund which increases savings each year as opposed to NFL, FL paying an additional \$100 for each debt payment resulting in reduction of debt faster, and FL paying a larger down payment with lower interest for purchase of the home, and varying interest rates due to these decisions. Currently, the program is hardcoded to these specific values and interest rates. The simulation will output the results of such instances to two files given in the command prompt.

IN ORDER TO RUN PROGRAM

```
$ ./FinancialSimulation output_fl.txt output_nfl.txt
```

Insert the above command into the command prompt. The order of the files is critical as the first file will always output the financially literate results and the second the non-financially literate results. The executable is named as FinancialSimulation.exe. I was able to execute my code using the command below (removing the \$). Warning if the program fails to provide two files or the files were not able to be opened, it will automatically terminate the program with no output.

```
./FinancialSimulation output_fl.txt output_nfl.txt
```

EXAMPLE OUTPUT OF ONE FILE

```
1  WEALTH RESULTS FOR FINANCIALLY LITERATE
2  -----
3  Person's Statistics:
4  Checking: 0.000000
5  Savings: 5000.000000
6  Debt: 52500.000000
7  Debt Paid: 0.000000
8  Years With Debt: 0
9  Mortgage: 0.000000
10 Years Rented: 0
11 Owns House (1 = True, 0 = False): 0
12 -----
13 Year: 0, -47500
14 Year: 1, -29564
15 Year: 2, -9582
16 Year: 3, -186195
17 Year: 4, -160046
18 Year: 5, -131930
19 Year: 6, -101962
20 Year: 7, -70205
```

...(continued output)...

```
51 Year: 38, 2411085
52 Year: 39, 2587385
53 Year: 40, 2774902
54 -----
55 Person's Statistics:
56 Checking: 464647.872477
57 Savings: 2394321.458687
58 Debt: 0.000000
59 Debt Paid: 72694.016226
60 Years With Debt: 8
61 Mortgage: 84066.478699
62 Years Rented: 2
63 Owns House (1 = True, 0 = False): 1
64 -----
```