

CSCI 3328 Object Oriented Programming in C#

Fall 2012

Assignment #4

Instructor: Dr. Xiang Lian
Due Date: See the course Web page

Write a program to calculate future value of periodic investments. Assume you start a retirement savings account with an initial investment and make contribution to it each month until you retire at the age of 65. How much money will you have in the account given *a fixed rate of return compounded daily*? To make the calculations easy, I am asking you to make a deposit every thirty days (don't have to worry about number of days in each month, unless you want to take the time to do it.). When you do it this way every 6 years you will have an extra deposit (5 days saved up from each year). See the program run in the Appendix.

Reference: Compound interest: http://en.wikipedia.org/wiki/Compound_interest

Please submit:

1. Program listing, and
2. The screen captures (as given in the Appendix)

Please submit all files in a compressed *.zip file.

- Your program should begin with a comment section that would include the following:

PROGRAMMERS NAME: _____
STUDENT ID: _____
CLASS: _____ ASSIGNMENT #: _____
DATE DUE: _____ DATE TURNED IN: _____

- Upload the *.zip file you created to the Blackboard. The subject of the submission must include the following information:
[CSCI 3328] [Assignment #] [Your Name Here] [Your Student ID Here]

Appendix: Examples of Screen Captures

Future value of periodic investment

Input

Initial Deposit 3000.00 Calculate

Deposit every 30 days 250.00

Rate of Interest per annum 8.5

Age when Account Started 25

Retirement Age 65 Exit

Age	Beg Balance	Yearly Int	Yearly Dep	Ending Bal
26	0,003,000.00	00,388.16	3,000.00	0,006,388.16
27	0,006,388.16	00,688.71	3,000.00	0,010,076.87
28	0,010,076.87	01,015.92	3,000.00	0,014,092.80
29	0,014,092.80	01,372.16	3,000.00	0,018,464.96
30	0,018,464.96	01,760.00	3,000.00	0,023,224.96
31	0,023,224.96	02,182.24	3,250.00	0,028,657.20
32	0,028,657.20	02,664.12	3,000.00	0,034,321.32
33	0,034,321.32	03,166.56	3,000.00	0,040,487.88
34	0,040,487.88	03,713.57	3,000.00	0,047,201.45
35	0,047,201.45	04,309.11	3,000.00	0,054,510.56
36	0,054,510.56	04,957.47	3,000.00	0,062,468.04
37	0,062,468.04	05,663.35	3,250.00	0,071,381.39
38	0,071,381.39	06,454.02	3,000.00	0,080,835.41
39	0,080,835.41	07,292.65	3,000.00	0,091,128.06
40	0,091,128.06	08,205.67	3,000.00	0,102,333.73
41	0,102,333.73	09,199.69	3,000.00	0,114,533.42
42	0,114,533.42	10,281.88	3,000.00	0,127,815.30
43	0,127,815.30	11,460.06	3,250.00	0,142,525.36
44	0,142,525.36	12,764.94	3,000.00	0,158,290.30
45	0,158,290.30	14,163.39	3,000.00	0,175,453.69
46	0,175,453.69	15,685.89	3,000.00	0,194,139.58
47	0,194,139.58	17,343.45	3,000.00	0,214,483.03
48	0,214,483.03	19,140.04	3,000.00	0,236,623.07