CSCI/CMPE 3328 Object Oriented Programming in C# 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 <u>a fixed annual interest rate</u>? To make the calculations easy, I am asking you to make a deposit every 30 days (do not have to worry about number of days in each month, unless you want to take the time to do it.), and <u>obtain compounded interests monthly</u>. 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: <u>http://en.wikipedia.org/wiki/Compound_interest</u>

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:

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/CMPE 3328] [Assignment #] [Your Name Here] [Your Student ID Here]

Appendix: Examples of Screen Captures

🖳 Futu	re value of periodi	c investmen	t		
- Input-	Initial Dep	oosit	3000.00	Calculate	
Deposit every 30 days		250.00			
Rate of Interest per annum		8.5			
Age w	hen Account S	Started	25		
	Retiremen	t Age	65	Exit	
===== Age	Beg Balance	Yearly Ir	nt Yearly D	lep Ending Bal	<u>^</u>
26 27 28 29 30 31 32 33 34 35	0,003,000.00 0,006,388.16 0,010,076.87 0,014,092.80 0,018,464.96 0,023,224.96 0,028,657.20 0,034,321.32 0,040,487.88 0,047,201.45	00,388.16 00,688.71 01,015.92 01,372.16 01,760.00 02,182.24 02,664.12 03,166.56 03,713.57 04,309.11	3,000.00 3,000.00 3,000.00 3,000.00 3,250.00 3,000.00	0,010,076.87 0,014,092.80 0,018,464.96 0,023,224.96 0,028,657.20 0,034,321.32 0,040,487.88 0,047,201.45	=
Age	Beg Balance	Yearly Ir	it Yearly D	ep Ending Bal	
36 37 38 39 40 41 42 43 44 45	0,054,510.56 0,062,468.04 0,071,381.39 0,080,835.41 0,091,128.06 0,102,333.73 0,114,533.42 0,127,815.30 0,142,525.36 0,158,290.30	04,957.47 05,663.35 06,454.02 07,292.65 08,205.67 09,199.69 10,281.88 11,460.06 12,764.94 14,163.39	3,250.00 3,000.00 3,000.00 3,000.00 3,000.00 3,000.00 3,250.00 3,000.00	0,071,381,39 0,080,835,41 0,091,128,06 0,102,333,73 0,114,533,42 0,127,815,30 0,142,525,36 0,158,290,30 0,175,453,69	
Age	Beg Balance	Yearly Ir	nt Yearly D		
46 47 40	0,175,453.69 0,194,139.58 0,214,403,03	15,685.89 17,343.45 10,140.04	3,000.00	0,194,139.58 0,214,483.03	-