

**CSCI 3327**  
**Assignment 2**  
**Dr. Abraham**

**Objective:** Loops, text boxes & formatted output.

Saving for future is a very necessary practice. Many of us do not know the power of compounding interest. Your assignment is to write a program that can be used to show people how much money they will have accumulated over their gainful employment period. An individual should start the account with an initial investment and then add to it every 30 days (not each month). The interest will be compounded (interest for one day added to the principle) on a daily basis. Create a table that shows yearly figures of: Age, beginning principle, Interest earned for the year, deposits for the year and ending principle. Screen captures are given below:

The screenshot shows a window titled "Future Value" with the following input fields and buttons:

- Amount of Initial Deposit: 2000.00
- Amount of deposit every 30 days: 250.00
- Interest Rate per Annum: 9
- Age when account started: 25
- Age at Retirement: 65
- Buttons: CALCULATE, PRINT, CLEAR, STOP

The table below shows the calculated values for each year from age 26 to 35:

| Age | Beg Bal      | Yrly Int  | Yrly Dep | Ending Bal   |
|-----|--------------|-----------|----------|--------------|
| 26  | 0,002,000.00 | 00,317.75 | 3,000.00 | 0,005,317.75 |
| 27  | 0,005,317.75 | 00,630.16 | 3,000.00 | 0,008,947.92 |
| 28  | 0,008,947.92 | 00,971.98 | 3,000.00 | 0,012,919.90 |
| 29  | 0,012,919.90 | 01,346.00 | 3,000.00 | 0,017,265.90 |
| 30  | 0,017,265.90 | 01,755.22 | 3,000.00 | 0,022,021.12 |
| 31  | 0,022,021.12 | 02,202.99 | 3,250.00 | 0,027,474.11 |
| 32  | 0,027,474.11 | 02,716.45 | 3,000.00 | 0,033,190.56 |
| 33  | 0,033,190.56 | 03,254.72 | 3,000.00 | 0,039,445.28 |
| 34  | 0,039,445.28 | 03,843.68 | 3,000.00 | 0,046,288.96 |
| 35  | 0,046,288.96 | 04,488.10 | 3,000.00 | 0,053,777.06 |

**Future Value**

Amount of Initial Deposit: 2000.00

Amount of deposit every 30 days: 250.00

Interest Rate per Annum: 9

Age when account started: 25

Age at Retirement: 65

CALCULATE

PRINT

CLEAR

STOP

| Age | Beg Bal      | Yrly Int   | Yrly Dep | Ending Bal   |
|-----|--------------|------------|----------|--------------|
| 54  | 0,408,383.03 | 38,583.65  | 3,000.00 | 0,449,966.69 |
| 55  | 0,449,966.69 | 42,499.26  | 3,250.00 | 0,495,715.94 |
| 56  | 0,495,715.94 | 46,807.11  | 3,000.00 | 0,545,523.05 |
| 57  | 0,545,523.05 | 51,497.05  | 3,000.00 | 0,600,020.10 |
| 58  | 0,600,020.10 | 56,628.61  | 3,000.00 | 0,659,648.71 |
| 59  | 0,659,648.71 | 62,243.37  | 3,000.00 | 0,724,892.08 |
| 60  | 0,724,892.08 | 68,386.82  | 3,000.00 | 0,796,278.90 |
| 61  | 0,796,278.90 | 75,108.76  | 3,250.00 | 0,874,637.66 |
| 62  | 0,874,637.66 | 82,487.19  | 3,000.00 | 0,960,124.85 |
| 63  | 0,960,124.85 | 90,536.85  | 3,000.00 | 1,053,661.69 |
| 64  | 1,053,661.69 | 99,344.48  | 3,000.00 | 1,156,006.17 |
| 65  | 1,156,006.17 | 108,981.45 | 3,000.00 | 1,267,987.62 |