

ISYS 350, Spring 22, Assignment 5, Due Date: Wednesday, 3/30/22

Part 1: In the Functions PowerPoint, slide# 16 and 17, we create a Python module named: myFinancialService.py with two functions, futureValue and monthlyPayment. In this assignment, you add two more functions to the myFinancialService.py module:

- a. Add a value-returning function named goalSeek that takes present value, interest rate and target future value as input, and compute and **return** the number of years to reach the target back to the calling program. You may use the source code of goalSeek program on slide #26 of the loop PowerPoint.
- b. Add a void-function named showDepreciationTable that take property value and life as inputs and print the **double-declining depreciation table**. **This function does not return any value back to the calling program, simply print the table.** You may use the code of assignment 4, part 1 for this assignment.

Part 2: Create a second Python module, name it main.py, that uses the functions in the myFinancialService module. The program should first import the myFinancialService, and then do two things:

- (1) Get required inputs and call the goalSeek function to print the year to the target.
- (2) Get required inputs and call the showDepreciationTable function to print the table.

Test the goalSeek function with this sample data:

```
Enter present value: 1000
Enter interest rate: .05
Enter target value: 10000
It takes 48 to reach the target.
```

And test the showDepreciationTable function with \$2000 property value and 10 years life as in assignment 4.

Submit the source code of myFinancialService.py, main.py, and the sample output.