

Programming Logic and Design

CA-PLDES

Assignment 1

Student Name: _____

Student Number: _____

Instructor: _____

Date: _____

Results:

Part 1: _____/15

Part 2: _____/7

Part 3: _____/3

Total: _____/25

Assignment 1: Green Acres Technical College

This assignment will require you to apply your skill and knowledge of the various control structures that you learned in Chapters 1 through 5. You will be required to create three (3) separate flowcharts depicting your solution to the problems below. Each part of the solution builds upon the previous part. You are to use the appropriate control structures, apply modularization techniques, and the common configuration for Mainline Logic.

Part 1.

Design a program for Green Acres Technical College to handle the tuition calculations for the school. The current tuition is \$20,000 per year, and tuition is expected to increase by 3 percent each year. Display the tuition each year for the next 10 years.

Part 2.

Modify the Green Acres Technical College program so that the user enters the rate of tuition increase instead of having it fixed at 3 percent per year

Part 3.

Modify the Green Acres Technical College program so that the user enters the rate of tuition increase for the first year. The rate then increases by 0.5 percent each subsequent year.

Critical points:

- Use the common configuration for Mainline Logic
- Modularization
- Proper Flowchart symbols and layout
- Identification of appropriate variables and constants (Proper naming)

What to Submit:

Flowchart for Part 1	15 points
Flowchart for Part 2	7 points
Flowchart for Part 3	3 points
	25 Points

Assignment Due: Start of Session 8