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CSCI 1500-01 – HW5

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**Problem #1:**

Problem: Create a calculator that prompts the user for the amount of credits they have completed and return their grade level.

Variable(s): *credits* (int) => stores users input of how many credits they have completed

Pseudocode: Prompt the user for the number of credits they have completed

Store input to *credits*

If *credits* < 32 print “First year”

If 32 <= *credits* <= 63 print “Sophomore”

If 63 <= *credits* <= 95 print “Junior”

If 96 <= *credits* print “Senior”

**Problem #2:**

Problem: Create a program that prompts the user for three test scores and display the highest and lowest scores.

Variable(s): *test1* (int) => stores user input for first test

*test2* (int) => stores user input for second test

*test3* (int) => stores user input for third test

*highest* (int) => stores highest score

*lowest* (int) => stores lowest score

Psuedocode: Prompt user for first test score

Store input to *test1*

Prompt user for second test score

Store input to *test2*

Prompt user for third test score

Store input to *test3*

Find highest score

Store to *highest*

Find lowest score

Store to *lowest*

Display highest score to user

Display lowest score to user

**Problem #3:**

Problem: Create a program that takes user input for desired number of shirts to be ordered and display the cost of the shirts, shipping and handling fee, and the total cost to the user.

Variable(s): *shirts\_qty* (int) => stores user input for how many shirts are ordered

*shirts\_price* (float) => stores total price of shirts in USD

*total\_price* (float) => stores total price of shirts and shipping and handling fee in USD

*ship\_fee* (float) => stores fee for shipping and handling

Pseudocode: Prompt user “Enter number of shirts: “

Store input to *shirts\_qty*

Calculate price of shirt through pricing tiers

If *shirts\_qty* < 4

*shirts\_price* = *shirts\_qty* \* 11.95

If 4 <= *shirts\_qty* < 8

*shirts\_price* = *shirts\_qty* \* 9.95

If *shirts\_qty* >= 8

*shirts\_price* = *shirts\_qty* \* 7.95

Calculate shipping and handling cost

If *shirt\_price* <= 25.00

*ship\_fee* = 3.50

If 25.01 <= *shirt\_price* <= 75.00

*ship\_fee* = 5.95

If *shirt\_price* >= 75.01

*Ship\_fee* = 7.95

Assign *total\_price* = *shirts\_price* + *ship\_fee*

Display “Total shirt cost = [*shirts\_price*]”

Display “Shipping and Handling = [*ship\_fee*]”

Display “Total final cost = [*total\_price*]”