CIS 106 Session Assignments Set 3 Problems.

Develop an IPO Chart and Python code the following problems. Upload the IPO and code files to Blackboard.

Save your files with the convention PS3P1, PS3P2 etc. PS3P1 is Problem set 3, program 1 etc.

1. Allow the user to enter the stock ticker symbol (ie MSFT for Microsoft, it’s a string variable), number of share and cost per share. Compute and display amount invested to be number of share times cost per share.

Inputs:

• ticker (string)

• num\_shares (float)

• cost\_per\_share (float)

Process:

amount\_invested = num\_shares × cost\_per\_share

Outputs:

• ticker

• amount\_invested (float)

1. The student will enter their last name, midterm and final exam score. Compute the total exam points to be the sum of the midterm and final exam. Display student last name and total exam points.

Inputs:

• last\_name (string)

• midterm (float)

• final\_exam (float)

Process:

total\_points = midterm + final\_exam

Outputs:

• last\_name

• total\_points (float)

1. You and two friends completed a job and received an amount that is entered into the problem. You are to split the amount received evenly between the three of you. Compute and display what each of you will receive.

Inputs:

• total\_amount (float)

Process:

each\_share = total\_amount / 3

Outputs:

• each\_share (float)

1. Enter the make, model, msrp amount and discount percent of an auto you are interested in. Compute the amount off msrp you will receive as well as the discounted price. The amount off is computed to be the msrp times the discount percent (you can enter as a decimal so no need to divide by 100). The discounted price is the msrp minus the amount off. Display the make, model, mrsp, discount percent, amount off and discounted price.

Inputs:

• make (string)

• model (string)

• msrp (float)

• discount\_percent (float, decimal form)

Process:

amount\_off = msrp × discount\_percent

discounted\_price = msrp − amount\_off

Outputs:

• make

• model

• msrp

• discount\_percent

• amount\_off

• discounted\_price

1. Allow the user to enter a radius of a circle. Compute and display the area to be pie times radius squared (use 3.174 for pie and multiple radius time radius for radius squared). Also, compute and display the perimeter (2 time pie \* radius).

Inputs:

• radius (float)

Process:

area = π × radius² (use π = 3.174)

perimeter = 2 × π × radius

Outputs:

• area (float)

• perimeter (float)