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.

|  |  |  |
| --- | --- | --- |
| * Stock ticker symbol * Number of shares * Cost per share | * Number of shares x cost per share = total amount invested | * Display stock ticker symbol * Display total amount invested |

#input phase

ltiker = input ("enter ticker symbol")

shares = float(input("enter number of shares"))

cost = float(input("enter cost per share"))

#process phase total\_amount\_invested = shares \* cost

#output phase

print ("Stock tiker symbol:", ltiker)

print ("total amount invested:", total\_amount\_invested)

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.

|  |  |  |
| --- | --- | --- |
| * Enter student last name * Midterm score * Final exam score | * Midterm score + Final exam score | * Display student last name * Total exam point |

#input phase

lname = input("Enter student last name")

midterm = float(input("Enter midterm score"))

final = float(input("Enter final score"))

#process phase

total = midterm + final

#output phase

print("Student: ", lname)

print ("total points earned", total)

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.

|  |  |  |
| --- | --- | --- |
| * Enter amount received ($360) * Number of people splitting the money (3) | * Amount received / number of people splitting the money = amount received per person   ($360 / 3 = 120) | * Display amount received per person ($120) |

#input phase

amount\_received = float(input("Enter amount received"))

number\_of\_people = float(input("Enter number of people"))

#process phase

amount\_per\_person = amount\_received / number\_of\_people

#output phase

print("Each person will receive $", amount\_per\_person)

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.

|  |  |  |
| --- | --- | --- |
| * Enter Make * Model * MSRP * Discount percentage, as decimal | * MSRP x discount percentage in decimal format = amount off * MSRP – amount off = discounted price | * Display Make * Model * MRSP * Discount percent * Amount off * Discounted price |

#input phase

make = input ("Enter car make")

model = input ("enter model")

MSRP = float(input("Enter MSRP"))

discount = float(input("Enter discount as decimal"))

#process phase

Amount\_off = MSRP \* discount

Discounted\_price = MSRP - Amount\_off

#output phase

print ("Make:", make)

print ("Model:", model)

print ("MSRP:", MSRP)

print ("Discount:", discount)

print ("Amount off:", Amount\_off)

print ("Discounted price:", 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).

|  |  |  |
| --- | --- | --- |
| * Enter Radius of a circle | * 3.174 x (radius x radius) = area * 2 x 3.174 x radius = perimeter | * Display Area * Perimeter |

#input phase

radius= float(input ("Enter radius of a circle"))

#process phase

area = 3.174 \* radius perimeter = 2 \* 3.174 \* radius

#output phase print ("Area:", area)

print ("Perimeter:", perimeter)