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.

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| --- | --- | --- |
| **Input** | **Process** | **Output** |
| enter the stock ticker symbol | Compute the amount invested by multiplying the number of shares by the cost per share | Display the stock ticker symbol |
| Enter the number of shares |  | Display the Amount Invested |
| Enter the cost per share |  |  |
|  |  |  |

stock\_ticker=inputMIdte("Enter the stock ticker symbol:")

num\_shares=float(input("Enter the number of shares:"))

cost\_per\_share=float(input("Enter the cost per share:"))

amount\_inv=num\_shares\*cost\_per\_share

print("The Stock ticker symbol is:", stock\_ticker)

print("The Amount Invested was:", amount\_inv)

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.

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| **Input** | **Process** | **Output** |
| Enter your last name | Compute the total exam points by summing the midterm exam score and the final exam score | Display the student last name |
| Enter your midterm exam score |  | Display the total exam points |
| Enter your final exam score |  |  |

last\_name=input("Enter your Last Name:")

midterm\_ex=float(input("Enter your Midterm exam score:"))

final\_ex=float(input("Enter your Final exam score:"))

tot\_exam\_points=midterm\_ex+final\_ex

print("Your Studen Last Name is:",last\_name)

print("Your Total Exam Points are:",tot\_exam\_points)

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.

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| **Input** | **Process** | **Output** |
| Input amount received | Compute each amount received by dividing the total amount received by 3 | Display the each amount received |
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amount\_received=float(input("Input Amount Received:"))

each\_amount\_received=amount\_received/3

print("Each of you will Received:", each\_amount\_received)

1. Enter the make, model, msrp (manufacturer’s suggested retail price) 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.

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| **Input** | **Process** | **Output** |
| Input the make of the car | Compute the amount off by multiplying the discount percent by the MSRP | Display the amount off |
| Input the model of the car | Compute the discounted price by subtracting the amount off from the MSRP. | Display the discounted price |
| Input the msrp for the car |  |  |
| Input the discount percent of the car |  |  |

make=input("Enter The Make of the Car:")

model=input("Enter The Model of the Car:")

msrp=float(input("Enter The MSRP for the Car:"))

discount\_percent=float(input("Enter The Discount Percent of the Car in decimals:"))

amount\_off=msrp\*discount\_percent

discount\_price=msrp-amount\_off

print("The Make of the car is:", make)

print("The Model of the car is:", model)

print(f'The Msrp of the car is:{msrp:,.2f}')

print(f'The Amount Off is: {amount\_off:,.2f}')

print(f'The Discount Price is:{discount\_price:,.2f}')

1. Allow the user to enter a radius of a circle. Compute and display the area to be pi times radius squared (use 3.1416 for pi and multiple radius time radius for radius squared). Also, compute and display the perimeter (2 time pi( \* radius).

|  |  |  |
| --- | --- | --- |
| **Input** | **Process** | **Output** |
| Input the radius of a circle | Compute radius squared by multiplying radius by radius | Display the area |
|  | Compute the area by multiplying 3.1416 by radius squared | Display the perimeter |
|  | Compute the perimeter by multiplying 2 by 3.1416, then multiplying the result by the radius |  |

radius=float(input("The Radius of Circle:"))

radius\_square=radius\*radius

Pi=3.1416

area=(Pi\*radius\_square)

perimeter=(2\*Pi)\*(radius)

print("The Area of the circle is:", area)

print("The Perimeter of the Circle is:", perimeter)