Intro to Python - Lesson 3

Please review the following videos before the Python class on input() and print().

https://www.youtube.com/watch?v=-Xyh9RUJuyE
https://www.youtube.com/watch?v=5Omd8E1_1V8

Use the following exercises to practice IPO Charts and writing code.

1. Prepare a program to help determine spending habits of an individual or family. Allow the user to input the total monthly revenue, and the amount spent on each of the following: Mortgage / Rent, Food, Clothing, and Entertainment. Calculate the total expenses for the month, the total savings for the month, and the percentage of total revenue spent on each expense. Display all input and all calculated values to the screen. NOTE: What can we do with the percentages to make them easier to read for the user.

2. The local gas station does car repairs. The attendants at the station would like a program to determine the customer's bill. The user will be required to enter the customer's name, the cost for parts, and the hours of labor. Determine the cost of labor using a labor rate of $35.00 per hour. The Subtotal is the cost of parts plus the cost of labor. Calculate the HST on the parts only using a rate of 15%. The total bill is the Subtotal plus the taxes. Display the customer's name, cost of parts, cost of labor, HST, and total bill.

3. Help the Nik – Nak Company keep track of customer accounts and new balances based on transactions make at the store. The user is required to enter the customers name, their account number, the previous months balance, the total value of purchases this month, and the total value of payments this month. Calculate monthly interest on the previous balance using a yearly interest rate of 28%. The new account balance at month end is calculated as the previous balance plus the purchases, less the payments, plus the interest on the previous balance. Finally, calculate the minimum payment due as 10% of the new account balance.

4. Mo's Lawncare Services is a company that will perform maintenance on your lawn by appointment. Services include border trimming, lawn mowing, and fertilizer treatment. Allow the user to enter the Customer name, street address, city, and the total number of square feet for the property. Borders are 4% of the total square footage and is charged at .35 cents per square foot of border. Lawn moving is based on the remaining 95% of the lawn at a cost of .07 cents per square foot of lawn. Finaly, fertilizer treatment is charged at .05 cents per square foot. The total charges are found by adding all costs together. Sales taxes (HST) are calculated at 15% of the total charges. Additionally, an environmental tax calculated at 3% of the total charges as well. The Invoice total is the total charges plus the sales taxes plus the environmental tax.

See you at 1.