

Problem 1:

Input:

- Prompt the user repeatedly if they want to continue the program (input: Yes or No).
- If they respond "Yes", go into the loop and prompt them for last name, month, and sales.

Process:

- Write a function to compute next month's forecast.
 - Pass to the function month and sales.
 - Determine the forecast percent based on the month.
 - Compute next month's sales to be $\text{sales} \times (1 + \text{forecast percent})$.
 - Return next month's sales.
- Display the value of next month's sales.

Output:

- Display the value of next month's sales.

Problem 2:

Input:

- Prompt the user repeatedly if they want to continue the program (input: Yes or No).
- If they respond "Yes", go into the loop and prompt them for length, width, and height of a room.

Process:

- Write a function to compute the square footage of the room.
 - Receive the length, width, and height of the room.
 - Compute the square footage using the provided formula.
 - Compute the number of gallons needed to paint the room ($\text{square footage of the room} / 50$).
 - Return the number of gallons needed.

Output:

- Display the number of gallons needed to paint the room.

Problem 3:

Input:

- Prompt the user repeatedly if they want to continue the program (input: Yes or No).
- If they respond "Yes", go into the loop and prompt them for make, model, electric vehicle code (Y or N), and MSRP of an automobile.

Process:

- Write a function to compute the out the door price.
 - Pass to the function the MSRP, make, model, and electric vehicle code.
 - Determine the percent off the MSRP based on the make, model, and electric vehicle code.
 - Compute the new MSRP and add 7% sales tax to the total.
 - Return the total.
- Sum all MSRP's and sum of all sales price of the cars (MSRP – discount + tax).

Output:

- Display the total out the door price of the car.
- Display the sum of all MSRP values and the sum of all sales prices of the cars.

Problem 4:

Input:

- Prompt the user repeatedly if they want to continue the program (input: Yes or No).
- If they respond "Yes", go into the loop and prompt them for last name and miles from downtown Chicago.

Process:

- Write a function to compute the train ticket price.
 - Pass to the function the miles from downtown Chicago.
 - Determine the ticket price based on the provided table.
 - Return the ticket price.
- Sum price of all tickets.

Output:

- Display the sum of all ticket prices.

Problem 5:

Input:

- Prompt the user repeatedly if they want to continue the program (input: Yes or No).
- If they respond "Yes", go into the loop and prompt them for county and market value of a home.

Process:

- Write a function to compute the assessed value.
 - Pass to the function the county and market value.
 - Determine the assessed value percent based on the county.
 - Compute and return the assessed value (market value * assessed value percent).
- Sum and display all market values and assessed values.

Output:

- Display all market values and assessed values.