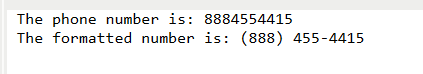
Ch.2 lab 3 Exercises

# Task 1

The following pseudocode describes how to turn a string containing a ten-digit phone number (such as "4155551212") into a more readable string with parentheses and dashes, like this: "(415) 555-1212".

*“Take the string consisting of the first three characters and surround it with "(" and ") ". This is the area code. Concatenate the area code, the string consisting of the next three characters, a hyphen, and the string consisting of the last four characters. This is the formatted number.”*

***Sample Output:***

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# Task 2

Given a string that has an even length, print the string with the middle two characters swapped. Assume that the string has at least 4 characters. Test your program with the following strings:

* Java-> Jvaa
* 123456 -> 124356
* Computer -> Comupter

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# Task 3

Write a program that helps a person decide whether to buy a hybrid car. Your program’s inputs should be:

•The cost of a new car

•The estimated miles driven per year

•The estimated gas price

•The efficiency in miles per gallon

•The estimated resale value after five years

Compute the total cost of owning the car for five years. (For simplicity, we will not take the cost of financing into account.)

**Sample output 1:**

Enter the cost of the car: 40000  
How many miles will you drive each year? 15000  
Enter the price of gas per gallon: 4  
Enter the fuel efficiency in mpg: 50  
How much can you sell the car for after 5 years? 18000  
The total cost of ownership is 28000.00

**Sample output 2:**

Enter the cost of the car: 24000  
How many miles will you drive each year? 15000  
Enter the price of gas per gallon: 4  
Enter the fuel efficiency in mpg: 50  
How much can you sell the car for after 5 years? 8000  
The total cost of ownership is 22000.00

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