

Exercises

Please pick two exercises and email completed scripts to ariel@ischool.berkeley.edu by Tuesday 10/13 with “i90 exercises” in the subject.

1. Create a program that prompts the user for a number of gallons of gasoline. Reprint that value along with its conversion to other measurements:

- Equivalent number of liters
- Number of barrels of oil required to produce it
- Number of pounds of CO2 produced
- Price in US dollars

Figures to use:

- 1 gallon is equivalent to 3.7854 liters
 - 1 barrel of oil produces 19.5 gallons of gas.
 - 1 gallon of gas produces approximately 20 pounds of CO2
 - The average price of gas is approximately \$3.65
2. Create a Madlib that prompts the user for a few nouns and verbs and prints a 4 or more lines of text with some of the nouns and verbs replaced by the user's input.

You can use this piece of text and replacement scheme if you like:

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This [noun1] is your [noun1], [noun1] is my [noun1]
From [place], to the New York [noun2]
From the [noun3] forest, to the gulf stream [plural noun]
This [noun1] was [verb] for you and me
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From Chapter 2

3. Write a program that allows a user to enter his or her two favorite foods. The program should then print out the name of a new food by joining the original food names together.

4. Write a Tipper program where the user enters a restaurant bill total. The program should then display two amounts: a 15 percent tip and a 20 percent tip.
5. Write a Car Salesman program where the user enters the base price of a car. The program should add on a bunch of extra fees such as tax, license, dealer prep, and destination charge. Make tax and license a percent of the base price. The other fees should be set values. Display the actual price of the car once all the extras are applied.