Practice Exercise Questions

Notes 1: Consider it as fun part of your learning and don't take it as a burden or assignment with a forced deadline. Do exercise by yourself.

Notes 2: Do not consult the solutions directly, make sure you first attempt the questions by yourself and If you are unable to get it correctly than consult the solution.

Note 3: If feel difficulties in understanding the solutions, post your question in the Q/A section of the course. Do not forget to mention the question number you are querying about.

Note 4: If you feel you have some exciting questions, please inbox to me and I will add to the questions list there after review. This will help you fellows to have more practice and fun.

Note 5: **Have Fun**

Q:1. You have a matrix for which each row is a person and the columns represent the number of quarters, nickels, dimes, and pennies that person has (in that order). A value of one in the matrix means that the respective person has a certain coin with him. You are required to determine the row index of the person with the most money? For instance, if we have the input matrix A = [1 0 0 0; 0 1 0 0; 1 1 1 0] than the output should be 3. Since the total amount with person 3 is $0.40.

Note for those unfamiliar with American coins: quarter = $0.25, dime = $0.10, nickel = $0.05, penny = $0.01.

Q:2. The following two equations are used to change the temperature between Fahrenheit and centigrade.

From centigrade to Fahrenheit F = (9/5 *C) +32

From Fahrenheit t to centigrade C = (F – 32) * 5/9.

Write MATLAB expression for converting a temperate from Fahrenheit to centigrade and from centigrade to Fahrenheit. Make sure you use the brackets correctly.

Q:3. Given two list of numbers (1D matrices), determine the weighted average. For instance, if we have A =[1 2 3] and B = [10 15 20] than the result should compute (1*10 + 2*15 + 3*20)/3 which is 33.3333 .

Q:4. Given two lists of numbers or sets A and B, check to see if their intersection is empty or not. If it is empty than the statement should return a logical 0, otherwise it should return a logical 1.

Hint: isempty() function tells you if a matrix is empty of not

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Q:5. There are two lists or 1D matrices namely A and B. The first list i.e., A is showing the prices of the items and the second one, i.e., B is showing how much quantity of each item was being bought by a customer. Write a MATLAB statement that will show the total final bill of a customer.

Enjoy MATLAB