Assignment Information

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EE355 HW 1

Problem 4

hw1p4.py

Answering question: See if if you come come up with an example of a dictionary that has tuples and lists as well. Do some queries to show how it works.

As mentioned in lines 15-16 of the file, I built my dictionary structure (LINES 27 - 34) with help from https://www.w3schools.com/python/python_dictionaries.asp I learned basic structure of dict and how to find length of a dictionary (LINE 37)

Problem 5

hw1p5.py

Answering: Given two sorted arrays arraynum1 and arraynums2 of size m and n respectively, return the median of the two sorted arrays. You may code this in either Python or C, your choice.

- arraynums1.length == m
- arraynums2.length == n
- $0 <= m <= 1000$
- $0 <= n <= 1000$
- $1 <= m + n <= 2000$
- $-10^6 <=$ arraynums1[i], arraynums2[i] $<= 10^6$

As mentioned in line 18: while loop conditions and sorting algorithm (lines 19-44) implemented using https://www.geeksforgeeks.org/merge-two-sorted-arrays/

Problem 7

hw1p7.c

Answering question: Implement a function (in C. No C++ allowed here) that takes in an array of integers (A) and a size (N) as parameters. It then populates another array (B) where B[i] is the product of all A[j] where j != i.
For example: If A = {4, 6, 2, 8}, then B would be {96, 64, 192, 48}.

As mentioned in lines 10-13: To write my function and ensure that it properly returned an array, I used https://www.javatpoint.com/return-an-array-in-c to initialize (line 11) my function, initialize the arrays b and B (line 12 and 30) as well as brush up on my pointer notation skills used in lines 19 and 35. I had forgot how to return an array through a

function, but this website provided several helpful examples of how to return an array and assign it to a value in the main code.