List Questions

1. Create a program that will keep track of items for a shopping list. The program should keep asking

for new items until nothing is entered (no input followed by enter/return key). The program should

then display the full shopping list.

2. Write a program that will store the schedule for a given day for a particular TV station. The program

should ask you for the name of the station and the day of the week before asking you for the name of

each show and the start and stop times. Once the schedule is complete it should be displayed as a

table

3. WAPP to multiply two matrix supplied by user in row-major representation

4. Convert a string into characters

5. Sort the list by the length of string elements

6. Sort the list in reverse order

7. Given a non-empty array, return true if there is a place to split the array so that the sum of the

numbers

on one side is equal to the sum of the numbers on the other side.

canBalance([1, 1, 1, 2, 1]) \rightarrow true

canBalance([2, 1, 1, 2, 1]) \rightarrow false

canBalance([10, 10]) \rightarrow true

8. Given two arrays of integer sorted in increasing order, outer and inner, return true if all of the

numbers in inner appear in outer. The best solution makes only a single "linear" pass of both arrays,

taking advantage

of the fact that both arrays are already in sorted order.

linearIn([1, 2, 4, 6], [2, 4]) \rightarrow true

linearIn([1, 2, 4, 6], [2, 3, 4]) \rightarrow false

linearln([1, 2, 4, 4, 6], [2, 4]) \rightarrow true

9. Write a Python function that takes a list and returns a new list with unique elements of the first list.

Sample List: [1,2,3,3,3,3,4,5]

Unique List: [1, 2, 3, 4, 5]

10. Write a Python program to print the even numbers from a given list.

Sample List:[1, 2, 3, 4, 5, 6, 7, 8, 9]

Expected Result: [2, 4, 6, 8]