Structure and Interpretation of Computer Programs with Python

Lesson 6

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Exercise

Assign the first element of the list to answer_1 on line 2

```
lst = [11, 100, 99, 1000, 999]
answer_1=
print(answer_1)
```

Exercise

Take a list and write a program that prints out all the elements of the list that are less than 5.

```
a = [1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89]
```

Exercise

Take a 2D list and make it 1D
Example input: a = [[1, 2, 3], [2, 3, 4], [5, 6, 3]]

Example output: [1, 2, 3, 2, 3, 4, 5, 6, 3]

Exercise:

You have a given list with unknown integer elements (like [1, 2, 3, 4, 5]). Iterate through the list using a for loop and find the sum of all elements

Exercise:

Create a program that creates an empty list by default. In each round, it takes in user input "add" or "remove", then it asks for the value user wants to add or remove, then execute the user's command. After each round, display the current list.

Exercise:

Create a gradebook using a list. It should first asks for user input(), say "Enter the score", then according to the score, append the corresponding grade into the list.

Example: the input is 85, 95, 84, 40

output: [B, A, B, F]

Exercise:

Write a Python program which takes two digits m (row) and n (column) as input and generates a two-dimensional array. The element value in the i-th row and j-th column of the array should be i*j.

Note :

i = 0,1.., m-1

j = 0,1, n-1.