

**Write python scripts for the following:**

1. Concatenate two lists of strings at corresponding indices and display the new list. For example:

```
list1=["M","na","i","kav"]
```

```
list2=["y","me","s","itha"],
```

Result is

```
list3=["My","name","is","Kavitha"]
```

2. Accept a list of numbers and test if a number is equal to the sum of the cubes of its digits. Display all such numbers from the list.
3. Accept numbers from the user and create a tuple with those numbers. Count the longest sequence of odd numbers from the tuple and display it as a tuple.  
For example : if the tuple t=(1,2,3,5,7,9,10),  
Expected output is : Longest sequence of odd numbers in the tuple : (3,5,7,9)

4. Accept a list of unique words from the user, display all the pairs of the distinct indices (i, j) in the given list, so that the concatenation of the two words words[i] + words[j] is a palindrome.

Example:

Input: words = ["abcd","dcba","lls","s","ssll"]

Output: [[0,1],[1,0],[3,2],[2,4]]

Explanation: The palindromes are ["dcbaabcd","abcddcba","slls","llssll"]

5. Accept a number n from the user and create a nested list (2D) as shown below for n=5:

```
0 1 2 3 4
```

```
1 2 3 4 0
```

```
2 3 4 0 1
```

```
3 4 0 1 2
```

```
4 0 1 2 3
```

6. Write a *menu driven* Python script for the following:

Create a nested master list of students where each element is of the following format [rollno,name]

For example: [[1,'Ajay'], [2,'Rohit'],.....]. ***Note that the list need not be sorted.***

A teacher maintains another list where the rollno of a student is entered each time a student gets a reward for positive attitude in class. For example : [1,5,5,7,9,.....]. ***In this list , roll numbers appear as many times as the student gets a reward.***

- a) Use these two lists to count the number of rewards received by each student and display a report in tabular format. Search the master list to locate the name of the student from the master list.
- b) The teacher should have the option to add another value to the rewards list or to see the report.

**Output format:**

Roll No

Name

No. of Rewards

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