

Python – Lists and its Operations

Problem Sheet – Python Lists

- Prepare a PDF file for submission, which should contain question, its corresponding python code and output screenshot.

1. Create a list of countries (say **country_list**). The initial list must contain names for 10 countries.

- a. Print the entire list of countries.
- b. Print the countries from index '0' to last positive index.
- c. Print the countries from index '-1' to last negative index.
- d. Print the name of countries, whose first letter is vowel.
Eg: India, America.
- e. Check whether 'India' is present in **country_list** or not.
Display the result clearly on the screen.
- f. Print the countries between the index [2] and [9]. Both [2] and [9] are included.

Eg. Output Format:

[2]: India

[3]: America

.

.

[9]: Italy

- g. Replace 'India' by 'Our India'. Show this change on screen.

- h. Find the length of the current **country_list** and print it on screen.
- i. Add 5 more new countries to the end of the existing **country_list** and show the new list on the screen.
- j. Find the length of the current **country_list** and print it on screen.
- k. Add 5 more new countries to the indices [0], [2], [4], [6], [8]. Show the new list on the screen.
- l. Find the length of the current **country_list** and print it on screen.
- m. Print the list of countries, whose name length is less than or equal to 10 characters.
Eg: India, Italy, Sri Lanka
- n. Read the choice (country name) from user and remove it from the current **country_list** using **remove ()**. Show the new list on the screen.
- o. Read the choice (index) from user and remove the corresponding country using **pop()**. Show the new list on the screen.
- p. Using **pop()**, remove the country which is at the end of the current **country_list**. Show the new list on the screen.
- q. Using **del**, remove the countries from current **country_list**, whose index values are [1], [3], [5]. Show the new list on the screen.
- r. Using **del**, delete the current **country_list**. Show the change in screen.

2. Read the name of 10 cars from user and add them to a list (say list_of_cars) using for loop. Print the list on the screen.

Refer the Sample Code and Output given below.

```
a=input("Enter the name of an Actor: ")
actor_list=[a]
print("Actors list")
print(actor_list)
```

```
print("\n\n")
a=input("Enter the name of an Actor: ")
actor_list.append(a)
print("Actors list")
print(actor_list)
```

```
Enter the name of an Actor: Ajith
Actors list
['Ajith']
```

```
Enter the name of an Actor: Vijay
Actors list
['Ajith', 'Vijay']
```