

### Practical-3 (8)

#### Topics: sequences

1. Develop a menu-based python program (menu items: 1. Addition 2. Subtraction 3. Multiplication 4. Division 5. Average 6. Find maximum 7. Find minimum) for a numeric list.
2. Develop a menu-based python program (menu items: 8. Calculate mean 9. Calculate Median 10. Calculate Mode) for a numeric tuple.
3. Develop a menu-based python program to implement stack. Stack may accommodate elements with heterogeneous datatype.  
Menu items should be: 1. Push 2. Pop 3. Peep 4. Reverse stack.
4. Develop a python program to remove duplicates from (1) list (2) map.
5. Develop a python program to create a list having odd numbers between 1 and 100. Now remove prime numbers from the list.
6. Develop a python program to check whether a tuple contains a sub-tuple or sub-list.
7. Develop a python program to generate a list of dictionary elements from two given lists.

E.g.

I/P:

```
rollno = [MA001, MA002, MA003, MA004];  
surname = ['dave', 'gandhi', 'godiwala', 'gujarati'];
```

O/P:

```
students = [{'Rollno': 'MA001', 'Surname': 'dave'}, {'Rollno': 'MA002',  
'Surname': 'gandhi'}, {'Rollno': 'MA003', 'Surname': 'godiwala'}, {'Rollno': 'MA004',  
'Surname': 'gujarati'}]
```

8. Develop a python program to generate a list from a given sentence. E.g.

I/P: "Arise, awake, and stop not till the goal is reached."

O/P: ['Arise,', 'awake,', 'and', 'stop', 'not', 'till', 'the', 'goal', 'is', 'reached.']

Vice versa,

I/P: ['Smart', 'and', 'hard', 'work!'];

O/P: Smart and hard work! (Notice: the white space characters in I/P & O/P)

9. (OPTIONAL)

Develop a python program to print the largest word from a sentence.

10. (OPTIONAL)

Assume the following list URL\_List.

I/P:

```
URL_List = ['www.yahoo.com', 'www.facebook.com', 'www.ddu.ac.in',  
'www.google.com', 'www.en.wikipedia.org', 'www.auda.org.au']
```

From the URL\_List, create a list Domain\_List which contains respective domain types.

O/P:

```
Domain_List = ['com', 'com', 'ac.in', 'com', 'org', 'org.au']
```