

## Lab Exercise - 3

### [Based on Python Data Types (String, List, Tuple & Conditional statements)]

Q1: Write a Python program to sum all the items in a list.

Q2: Write a Python program to get the largest number from a list.

Q3: Write a Python program to get the smallest number from a list.

Q4: Write a Python program to display the first and last colors from the following list.

```
color_list = ["Red","Green","White" ,"Black"]
```

Q5: Write a Python program to add 'ing' at the end of a given string (length should be at least 3). If the given string is already ends with 'ing' then add 'ly' instead.

Q6: The marks obtained by a student in 5 different Subjects are input through a keyboard. The Student gets a division as per the following rules.

1. Percentage above or equal to 60 – First Division
2. Percentage between 50 and 59 – Second Division
3. Percentage between 40 and 49 – Third Division
4. Percentage less than 40 – Fail

Write a python program to Display the result based on the above Criteria.

Q7: write a Python program to find the largest number among the three input numbers

Q8: Write a Python program to check if the input year is a leap year or not.

Q9: write a Program to check if a string is palindrome or not

Q10: write a Program to sort alphabetically the words form a string provided by the user. [You can use split() method to split string into a list of words. ]

Q11: Given a nested list. Write a python program to extend it with adding sub list ["h", "i", "j"] in a such a way that it will look like the following list

Given List:

```
list1 = ["a", "b", ["c", ["d", "e", ["f", "g"], "k"], "l"], "m", "n"]
```

```
Sub List to be added = ["h", "i", "j"]
```

Expected output:

```
['a', 'b', ['c', ['d', 'e', ['f', 'g', 'h', 'i', 'j'], 'k'], 'l'], 'm', 'n']
```

Q12: Write a python program for Given a Python list, to find value 20 in the list, and if it is present, replace it with 200. Only update the first occurrence of a value

```
list1 = [5, 10, 15, 20, 25, 50, 20]
```

Expected output:

```
list1 = [5, 10, 15, 200, 25, 50, 20]
```