

Practical Set – 3

Program 3.1: Write python program to check whether the given list is palindrome or not using 1. reverse() method 2. Slicing.

- **using reverse() method**

```
list1 = [1, 2, 3, 4, 1]
list2 = list1
list1=list1.reverse()
if list2 == list1:
    print("Given list is palindrome..")
else:
    print("Given list is not palindrome..")
```

Output:

Given list is not palindrome..

- **using slicing**

```
list1 = [1, 2, 3, 2, 1]
if list1[::-1] == list1:
    print("Given list is palindrome..")
else:
    print("Given list is not palindrome..")
```

Output:

Given list is palindrome..

Program 3.2: Take a list ['a', 'b', 'c', 'd'] & enumerate it using enumerate() function.

Code :

```
list1 = ['a', 'b', 'c', 'd']
l_type = enumerate(list1)
print("Type of list1 :", type(l_type))
print(list(enumerate(list1)))
print(list(enumerate(list1, 2)))
```

Output :

```
Type of list1 : <class 'enumerate'>
[(0, 'a'), (1, 'b'), (2, 'c'), (3, 'd')]
[(2, 'a'), (3, 'b'), (4, 'c'), (5, 'd')]
```

Program 3.3: Insert 10 numbers (taken from user) in a sorted list. [[Sorted list means a list which is always sorted: Don't use sort() method of list.]]

Code:

```
list1 = []
print("Enter 10 elements : ")
for i in range(10):
    value = int(input())
    for i in range(len(list1)):
        if list1[i] > value:
            break
    list1 = list1[:i] + [value] + list1[i:]

print(list1)
```

Output:

```
Enter 10 elements :
29
4
99
0
-2
3
88
44
12
109
[-2, 0, 3, 4, 12, 44, 88, 99, 109, 29]
```

Program 3.4: Consider sentence: "Hi Hello How are you ?". Display a list of all word which starts with letter 'H'.

Code:

```
str = "Hii ! Hello ! How are you ?"
letter = 'H'
lst = str.split(" ")

result = []
for i in lst:
    if i[0] == letter:
        result.append(i)
print(result)
```

Output:

```
['Hii', 'Hello', 'How']
```