

## Assignment - 14 More on List

### 1. Write a Python script to create a list of first N natural numbers.

```
n=int(input("Enter a number:"))
list=[]
for e in range(1,n+1):
    list.append(e)
print(list)
```

#### Output:-

Enter a number:5

[1, 2, 3, 4, 5]

### 2. Write a Python script to create a list of first N odd natural numbers.

```
n=int(input("Enter a number:"))
list=[]
for e in range(1,n*2,2):
    list.append(e)
print(list)
```

#### Output:-

Enter a number:5

[1, 3, 5, 7, 9]

### 3. Write a Python script to create a list of first N even natural numbers.

```
n=int(input("Enter a number:"))
list=[]
for e in range(2,n*2+2,2):
    list.append(e)
print(list)
```

**Output:-**

Enter a number:5

[2, 4, 6, 8, 10]

**4. Write a Python script to find the greatest number in a given list of numbers.**

```
list=[2, 4, 6, 8, 10]
```

```
print(max(list))
```

**Output:-**

10

**5. Write a Python script to find the smallest number in a given list of numbers.**

```
list=[2, 4, 6, 8, 10]
```

```
print(min(list))
```

**Output:-**

2

**6. Write a Python script to calculate the sum of elements in a given list of numbers.**

```
list=[2, 4, 6, 8, 10]
```

```
print(sum(list))
```

**Output:-**

30

**7. Write a Python script to remove all non int values from a list.**

```
list1=[2, 4.5, "Hello", 8.4, 1,"my",45]
```

```
list2=[]
```

```
for e in list1:
```

```
    if type(e)==int:
```

```
        list2.append(e)
```

```
print(list2)
```

**Output:-**

```
[2, 1, 45]
```

**8. Write a Python script to print distinct elements along with their frequencies of occurrence in the list.**

```
list=[1,2,3,4,3,2,1,5,2,4]
```

```
l1={}
```

```
for e in list:
```

```
    if e in l1:
```

```
        l1[e]+=1
```

```
    else:
```

```
        l1[e]=1
```

```
print("Distinct elements with frequencies:")
```

```
for e,count in l1.items():
```

```
    print(e,"-",count)
```

**Output:-**

Distinct elements with frequencies:

1 - 2

2 - 3

3 - 2

4 - 2

5 - 1

**9. Write a Python script to print indices of all occurrences of a given element in a given list.**

```
my_list = [1, 2, 3, 4, 3, 2, 1]
```

```
target_element = 3
```

```
indices = []
```

```
for i in range(len(my_list)):
    if my_list[i] == target_element:
        indices.append(i)
print(f"The indices of {target_element} in the list are: {indices}")
```

**Output:-**

The indices of 3 in the list are: [2, 4]

**10. Write a python script to sort a list.**

```
list=[1,5,4,6,3,2,1,9,8,2,4,3]
```

```
list.sort()
```

```
print(list)
```

**Output:-**

```
[1, 1, 2, 2, 3, 3, 4, 4, 5, 6, 8, 9]
```