

i) Create a LIST with your domain attributes, insert the elements using the append (), insert(), extend() and # add any iterables (tuples, sets, dictionaries etc.) to the list (Use all the methods).

```
lst=['User','Artist_id',"DOB",True]
print(lst)
lst.append("Password")
print(lst)
lst.insert(0,1)
print(lst)
lst.extend(['Genre','Artist',('The','Weeknd')])
print(lst)
```

```
['User', 'Artist_id', 'DOB', True]
['User', 'Artist_id', 'DOB', True, 'Password']
[1, 'User', 'Artist_id', 'DOB', True, 'Password']
[1, 'User', 'Artist_id', 'DOB', True, 'Password', 'Genre', 'Artist',
('The', 'Weeknd')]
```

*# Create a list with numeric and perform the following operations.
·Write a program to swap the first and last elements in a list.*

```
listnew=[1,2,3,4,-5,-6,7,8,9,10]
firstelement=listnew[0]
lastelement=listnew[-1]
listnew.pop(0)
listnew.pop(-1)
listnew.append(firstelement)
listnew.insert(0,lastelement)
print(listnew)
#another way to swap elements
listnew[0],listnew[-1] = listnew[-1],listnew[0]
print(listnew)
```

·Write a program to find the sum of the digits in a list.

```
sum=0
for i in listnew:
    sum+=i
print("Sum =",sum)
```

```
[10, 2, 3, 4, -5, -6, 7, 8, 9, 1]
[1, 2, 3, 4, -5, -6, 7, 8, 9, 10]
Sum = 33
```

·Write a program to find the smallest element in a list.

```
listnew=[1,2,3,4,-5,-6,7,8,9,10]
smallest=listnew[0]
for j in listnew:
    if j<listnew[0]:
        smallest=j
print(smallest)
```

```
#another way to find smallest
```

```
listnew.sort()
```

```
print(listnew[0])
```

```
-6
```

```
-6
```

```
# ii)Dictionaries
```

```
# ·Sort the dictionaries in ascending order based on the Key of the dictionary.
```

```
dictionary={3: "The Weeknd" , 1: "Drake" , 2: "21 Savage" , 4: "Travis Scott" }
```

```
new={}
```

```
to_a_List=list(dictionary.keys())
```

```
to_a_List.sort()
```

```
for i in to_a_List:
```

```
    sorteddict={i:dictionary[i]}
```

```
    new.update(sorteddict)
```

```
print(new)
```

```
{1: 'Drake', 2: '21 Savage', 3: 'The Weeknd', 4: 'Travis Scott'}
```

```
# · Create the dictionary with Numeric as Value in Key – Value pair and find the sum of all the values in the Dictionary.
```

```
dict = {'a': 100, 'b': 200, 'c': 300, 'd':400}
```

```
list = []
```

```
sum=0
```

```
for i in dict:
```

```
    list.append(dict[i])
```

```
for j in list:
```

```
    sum+=j
```

```
print("Sum :", sum)
```

```
Sum : 1000
```

```
# ·Write a Python code to demonstrate the sorting in descending order of values with lambda function
```

```
# Sample dictionary
```

```
data = {'a': 100, 'b': 200, 'c': 300, 'd':400}
```

```
# Sorting the dictionary in descending order of values using lambda function
```

```
sorted_data = {k:v for k,v in sorted(data.items(), key=lambda item: item[1], reverse=True)}
```

```
print(sorted_data)
```

```
{'d': 400, 'c': 300, 'b': 200, 'a': 100}
```