In [1]:
```
#Write a program that asks the user to enter a list of at least five integers. Do the following:
#Print out the total no of items in the list
# declare list of items
elem_list = [1, 2, 3, 4]

# printing the list
print(elem_list)

# using the len() which return the number
# of elements in the list
print("No of elements in list are:", len(elem_list))
```

```
[1, 2, 3, 4]
No of elements in list are: 4
```

In [2]:
```
#Print out the fourth item (index 3) in the list.
list=[70,56,32,4]
print(list[3])
```

```
4
```

In [3]:
```
#Print out the last three items in the list.
# Python code to demonstrate
# Get last three elements from list
# using list slicing

# initializing list
test_list = [4, 5, 2, 6, 7, 8, 10]

# printing original list
print("The original list : " + str(test_list))

# initializing N
N = 6

# using list slicing
# Get last three elements from list
res = test_list[-3:]

# print result
print("The last three elements of list are : " + str(res))
```

```
The original list : [4, 5, 2, 6, 7, 8, 10]
The last three elements of list are : [7, 8, 10]
```

In [25]:
```
#Print out all the items in the list except the first two.
# Python code to demonstrate
# Get all items in the list except first two
# using list slicing

# initializing list
test_list = [4, 5, 2, 6, 7, 8, 10]

# printing original list
print("The original list : " + str(test_list))

# initializing N
N = 6

# using list slicing
# Get last three elements from list
res = test_list[2:]

# print result
print("all items in the list except first two : " + str(res))
```

```
The original list : [4, 5, 2, 6, 7, 8, 10]
all items in the list except first two : [2, 6, 7, 8, 10]
```

In [6]:
```
#Print out the list in reverse order.
# input list
lst = [10, 11, 12, 13, 14, 15]
# the above input can also be given as
# lst=list(map(int,input().split()))
l = []  # empty list

# iterate to reverse the list
for i in lst:
    # reversing the list
    l.insert(0, i)
# printing result
print(l)
```

```
[15, 14, 13, 12, 11, 10]
```

In [7]:
```
#Print out the largest and smallest values in the list.
# Python prog to find out the largest and smallest values in the list
def find_len(list1):
    length = len(list1)
    list1.sort()
    print("Largest value is:", list1[length - 1])
    print("Smallest value is:", list1[0])
# Driver Code
list1 = [12, 45, 2, 41, 31, 10, 8, 6, 4]
Largest = find_len(list1)
```

```
Largest value is: 45
Smallest value is: 2
```

In [8]:
```
#Print out the sum of all the values in the list.
# Python program to find sum of elements in list


total = 0

# creating a list
list1 = [11, 5, 17, 18, 23]

# Iterate each element in list
# and add them in variable total
for ele in range(0, len(list1)):
    total = total + list1[ele]

# printing total value
print("Sum of all elements in given list: ", total)
```

```
Sum of all elements in given list:  74
```

In [9]:
```
#If the list contains a zero, print out the index of the first zero in the list, and otherwise print out a message saying there are no zeroes.
list=[0,0]
print(list[0])
```

```
0
```

In [10]:
```
#Sort the list and print out the list after sorting.
a = [7,1,0]
a.sort()
print(a)
```

```
[0, 1, 7]
```

In [11]:
```
#Delete the first item from the (now sorted) list and print out the new list
sample_list = [100, 400, 150, 600]
a = sample_list.pop(0)
print(sample_list)
```

```
[400, 150, 600]
```

In [12]:
```
#Change the second-to-last item in the list to 9876 and print out the new list.
L1=[9,8,7,6]
print (L1[-2])
```

```
7
```

In [13]:
```
#Append the value -500 to the end of the list and print out the new list.
# my_list
my_list = ['190', '213']

# Add '-500' to the list
my_list.append('-500')

print(my_list)
```

```
['190', '213', '-500']
```

In [26]:
```
#Write a program that asks the user to enter a list of numbers. Then print out the smallest thing in the list and the first index at which it appears in the list.

# list of numbers
list1 = [40,10,70,90,88]

# sorting the list
list1.sort()

# printing the first element
print("Smallest element is:", list1[0])
# printing the first index at which it appears in the list
list1 = [40,10,70,90,88]
print("First index appears in the list:",end="")
print(list1[0])
```

```
Smallest element is: 10
First index appears in the list:40
```

In [15]:
```
#Create a dictionary whose keys are the strings 'abc', 'def', 'ghi', 'jkl', and 'mno' and whose corresponding values are 7, 11, 13, 17, and 19. Then write dictionary code that does
#Print the value in the dictionary associated with the key 'def'
dict1 ={'abc':'7','def':'11','ghi':'13','jkl':'17','mno':'19'}
no =dict1['def']
print(no)
```

```
11
```

In [16]:
```
#Use the keys() method to print out all the keys
# Dictionary with  keys method()
Dictionary1 = {'abc': '11', 'def': '11', 'ghi': '13', 'jkl': '17','mno': '19'}

# Printing keys of dictionary
print(Dictionary1.keys())
```

```
dict_keys(['abc', 'def', 'ghi', 'jkl', 'mno'])
```

In [18]:
```
#Loop over the dictionary and print out all the keys and their associated values.
dict ={'abc':'7','def':'11','ghi':'13','jkl':'17','mno':'19'}
for key in dict.__iter__():
    print('key=', key)
    print('value=', dict[key])
```

```
key= abc
value= 7
key= def
value= 11
key= ghi
value= 13
key= jkl
value= 17
key= mno
value= 19
```

In [19]:
```
#Use an statement to check if the dictionary
# given key already exists in a dictionary.

def checkKey(dic, key):
    if key in dic.keys():
        print("Present, ", end=" ")
        print("value =", dic[key])
    else:
        print("Not present")


# Driver Code
dic = {'a': 100, 'b': 200, 'c': 300}
key = 'b'
checkKey(dic, key)

key = 'w'
checkKey(dic, key)
```

```
Present,  value = 200
Not present
```

In [20]:
```
#Change the value associated with the key 'abc' to 23 and then print out all the values in the
#dictionary using the values method
# Python3 Program to check whether a
# given key already exists in a dictionary.

def checkKey(dic, key):
    if key in dic.keys():
        print("Present, ", end=" ")
        print("value =", dic[key])
    else:
        print("Not present")


# Driver Code
dic = {'a': 100, 'b': 200, 'c': 300}
key = 'b'
checkKey(dic, key)

key = 'w'
checkKey(dic, key)
```

```
Present,  value = 200
Not present
```

In [22]:
```
#Write a program that asks the user to enter a string of lowercase letters and creates a list containing counts of how many times each letter appears in the string. The first index
string=input("Enter any string:")
c=input("Enter character to check frequency :")
count=0
for i in string:
    if i==c:
        count+=1
print(c,"occurs",count,"time(s).")
```

```
Enter any string:'radar'
Enter character to check frequency :radar
radar occurs 0 time(s).
```

In [ ]:
```

```