

```
In [9]: list1= [11,22,25,33,44,55,66,77,88,99]
        i=0
        total=0

        while i<len(list1):
            total = total + list1[i]
            i+=1
        print("Sum of all items in the list is ", total)
```

Sum of all items in the list is 520

```
In [14]: list1= [88,99,11,66,77,22,33,44,55,25]
        largest=list1[0]

        for i in list1:
            if i>largest:
                largest = i
        print("Sum of all elements in given list: ", largest)
```

Sum of all elements in given list: 99

```
In [17]: list1 = [11,13,15,16,13,15,16,11]
print ("The list is: ", list1)
result = []
for i in list1:
    if i not in result:
        result.append(i)
print ("The list after removing duplicates : ",result)
```

```
The list is: [11, 13, 15, 16, 13, 15, 16, 11]
The list after removing duplicates : [11, 13, 15, 16]
```

```
In [18]: list1 = []

if list1:
    print("list is not empty")
else:
    print("list is empty")
```

```
list is empty
```


```
In [19]: List1 = ['abc', 'xyz', 'aba', '1221']
newlist=[]
for i in List1:
    if len(i)<4:
        newlist.append(i)
print(newlist)
```

```
['abc', 'xyz', 'aba']
```

```
In [21]: lst1 = [15, 9, 10, 56, 23, 78, 5, 4, 9]
lst2 = [9, 4, 5, 36, 47, 26, 10, 45, 87]
newlst1=lst1+lst2
newlst2=[]
print("union of the given list is ",newlst1)
for i in lst1:
    for j in lst2:
        if i==j:
            newlst2.append(i)
print("intersection of the given list is ",newlst2)
```

```
union of the given list is [15, 9, 10, 56, 23, 78, 5, 4, 9, 9, 4, 5, 36, 47, 26, 10, 45, 87]
intersection of the given list is [9, 10, 5, 4, 9]
```

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 **jupyter** task3 Last Checkpoint: Last Tuesday at 7:22 PM (autosaved)

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```
In [2]: d=dict()
no=int(input("Enter the number : "))
if no<10:
    for x in range(1,no):
        d[x]=x**2
    print(d)
else:
    print("please enter the number less than 10")
```

Enter the number : 4
{1: 1, 2: 4, 3: 9}

```
In [1]: st = input("Enter a string: ")
dic = {}
for i in st:
    if i in dic:
        dic[i] += 1
    else:
        dic[i] = 1
print(dic)
```

Enter a string: aryalekshmi
{ 'a': 2, 'r': 1, 'y': 1, 'l': 1, 'e': 1, 'k': 1, 's': 1, 'h': 1, 'm': 1, 'i': 1 }

```
In [13]: myDict = {'ravi': 10, 'rajnish': 9, 'sanjeev': 15, 'yash': 2, 'suraj': 32, 'arya':13}

myKeys = list(myDict.keys())
myKeys.sort()
sorted_dict = {i: myDict[i] for i in myKeys}

print(sorted_dict)
```

```
{'rajnish': 9, 'ravi': 10, 'sanjeev': 15, 'suraj': 32, 'yash': 2}
```

```
In [2]: list1 = [10, 20, 4, 45, 99]

mx = max(list1[0], list1[1])
secondmax = min(list1[0], list1[1])
n = len(list1)
for i in range(2,n):
    if list1[i] > mx:
        secondmax = mx
        mx = list1[i]
    elif list1[i] > secondmax and mx != list1[i]:
        secondmax = list1[i]
    elif mx == secondmax and secondmax != list1[i]:
        secondmax = list1[i]

print("Second highest number is : ",str(secondmax))
```

```
Second highest number is : 45
```

```
print("Second highest number is : ",str(secondmax))
```

Second highest number is : 45

```
In [3]: string=input("Enter a letter:")
if(string==string[::-1]):
    print("The letter is a palindrome")
else:
    print("The letter is not a palindrome")
```

Enter a letter:[1,2,3,4,3,2,1]
The letter is not a palindrome

```
In [1]: my_dict = {'c': 3, 'a': 1, 'd': 4, 'b': 2}
sorted_dict = sorted([(value, key)
for (key, value) in my_dict.items()])
print("Sorted dictionary is :")
print(sorted_dict)
```

Sorted dictionary is :
[(1, 'a'), (2, 'b'), (3, 'c'), (4, 'd')]