

▼ Task 1

`l=['jagadeesh','deepak','kiran','venkat']`

`{'j': 1, 'a': 5, 'g': 1, 'd': 2, 'e': 5, 's': 1, 'h': 1, 'p': 1, 'k': 3, 'i': 1, 'r': 1, 'n': 2, 'v': 1, 't': 1}`

```
l=['jagadeesh','deepak','kiran','venkat']
s=''
for i in l:
    s+=i
s1=''
l1=[]
for j in s:
    if j not in s1:
        s1+=j
        c=0
        for k in s:
            if j==k:
                c+=1
        l1.append(c)
l2={s1[i]:l1[i] for i in range(len(l1))}
print(l2)

{'j': 1, 'a': 5, 'g': 1, 'd': 2, 'e': 5, 's': 1, 'h': 1, 'p': 1, 'k': 3, 'i': 1, 'r': 1, 'n': 2, 'v': 1, 't': 1}
```

▼ Task 2

`num = 9390018934`

```
num = 9390018934
n=num
while n>9:
    sum=0
    while num!=0:
        d=num%10
        sum+=d
        num//=10
    else:
        n=sum
        num=sum
else:
    print('sumed value of given number :',n)
    if n==2:
        print(n,'is a prime number')
    elif n==0:
        print(n,'is even')
    elif n==1:
        print(n,'is odd')
    elif n>2:
        for i in range(2,n):
            if n%i==0:
                if n%2==0:
                    print(n,'is even')
                else:
                    print(n,'is odd')
                break
        else:
            print(n,'is prime number')

    sumed value of given number : 1
    1 is odd
```

▼ Task 3

`l=[1,2,[4,5,6],[7,8,9]]`

`l = [1,2,3,4,5,6,7,8,9]`

```
l=[1,2,[4,5,6],[7,8,9]]
for i in l:
    if isinstance(i,list):
        l.extend(i)
    else:
        for j in l:
            if isinstance(j,list):
                l.remove(j)
            for k in l:
                if isinstance(k,list):
                    l.remove(k)
        else:
            print(l)

[1, 2, 4, 5, 6, 7, 8, 9]
```

▼ Task 4

$l=[1,2,[4,5,6],[7,8,9]]$

$l = [1,2,456,789]$

```
l=[1,2,[4,5,6],[7,8,9]]
for i in l:
    if isinstance(i,list):
        n=0
        for j in i:
            n=n*10+j
        else:
            l.append(n)
    else:
        for j in l:
            if isinstance(j,list):
                l.remove(j)
            for k in l:
                if isinstance(k,list):
                    l.remove(k)
        else:
            print(l)

[1, 2, 456, 789]
```