

```
Q1.ineuron
ineuron ineuron
ineuron ineuron ineuron
ineuron ineuron ineuron ineuron
n=4
for i in range(n):
    for j in range(0,i+1):
        print("ineuron" ,end = " ")
    print("\n")
```

O/P:
ineuron

ineuron ineuron

ineuron ineuron ineuron

ineuron ineuron ineuron ineuron

Q.2 ineuron

ineuron ineuron ineuron

ineuron ineuron ineuron ineuron ineuron

ineuron ineuron ineuron

ineuron

```
n=3
for i in range(n-1):
    for j in range(i,n):
        print(" ",end=" ")
    for j in range(i):
        print("ineuron",end=" ")
    for j in range(i+1):
        print("ineuron",end=" ")
    print("\n")
for i in range(n):
```

```

for j in range(i+1):
    print(" ",end=" ")
for j in range(i,n-1):
    print("ineuron",end=" ")
for j in range(i,n):
    print("ineuron",end=" ")
print("\n")

```

```

l=[[1,2,3,4],[2,3,4,5,6],[3,4,5,6,7],set([23,4,5,45,4,4,5,45,45,4,5]),{"k1":"sudh","k2":"ineu
ron","k3":"kumar",3:6,7:8},["ineuron","data science"]]

```

Q.3 Try to extract all the list entity

```

for i in l:
    if type(i)==list:
        for j in i:
            if type(j)==int:
                print(j)

```

O/P:1

2

3

4

Q.4 Try to extract all the tuple entity

```

for i in l:
    if type(i)==tuple:
        for j in i:
            if type(j)==int:
                print(j)

```

O/P:

2

3

4

5

6

3

4

5

6

7

Q.5 Try to extract all the numeric data it may be a part of dict keys and values.

```
l1=[]
```

```
for i in l:
```

```
    if type(i)==list or type(i)==tuple or type(i)==set:
```

```
        for j in i:
```

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

```
                l1.append(j)
```

```
    if type(i)==dict:
```

```
        for k,v in i.items():
```

```
            if type(k)==int or type(v)==int:
```

```
                l1.append(k)
```

```
                l1.append(v)
```

o/p: l1=[1, 2, 3, 4, 2, 3, 4, 5, 6, 3, 4, 5, 6, 7, 45, 4, 5, 23, 3, 6, 7, 8]

q.6 Try to extract all the dict entity

```
for i in l:
```

```
    if type(i)==dict:
```

```
        for k,v in i.items( ):
```

```
            print(k , " " , v)
```

O/P : k1 sudh

k2 ineuron

k3 kumar

3 6

7 8

Q.7 Try to find the summation of all the numeric data in the database.

```
sum=0
```

```
for i in range(0,len(l)):
```

```
    sum=sum+l[i]
```

```
    print(" sum of all elements in given list:",sum)
```

o/p:sum of all elements in given list: 1

sum of all elements in given list: 3

sum of all elements in given list: 6

sum of all elements in given list: 10

sum of all elements in given list: 12

sum of all elements in given list: 15

sum of all elements in given list: 19

sum of all elements in given list: 24

sum of all elements in given list: 30
sum of all elements in given list: 33
sum of all elements in given list: 37
sum of all elements in given list: 42
sum of all elements in given list: 48
sum of all elements in given list: 55
sum of all elements in given list: 100
sum of all elements in given list: 104
sum of all elements in given list: 109
sum of all elements in given list: 132
sum of all elements in given list: 135
sum of all elements in given list: 141
sum of all elements in given list: 148
sum of all elements in given list: 156

Q8. Try to filter all the odd values in the numeric data from the list.

`l=[1, 2, 3, 4, 2, 3, 4, 5, 6, 3, 4, 5, 6, 7, 45, 4, 5, 23, 3, 6, 7, 8]`

`for i in l:`

`if (i % 2)!=0:`

`print(i)`

o/p:

1

3

3

5

3

5

7

45

5

23

3

7

Q.9 Try to extract "ineuron" out of this data.

`for i in l:`

`if type(i)==list :`

`for j in i:`

`if j=="ineuron":`

```

        print(j)
    if type(i)==dict:
        for k,v in i.items():
            if v=="ineuron":
                print(v)

```

o/p: ineuron
ineuron

Q.10 Try to find out the number of occurrences of all the data.

```

for i in l:
    if type(i)==list or type(i)==tuple or type(i)==set :
        for j in i:
            if type(j)==str or type(j)==int:
                print(j," :",l.count(j))
    if type(i)==dict:
        for k,v in i.items():
            if type(k)==str or type(v)==str or type(k)==int or type(v)==int:
                print(k," :",l.count(k))
                print(v," :",l.count(v))

```

O/P:

```

1 : 0
2 : 0
3 : 0
4 : 0
2 : 0
3 : 0
4 : 0
5 : 0
6 : 0
3 : 0
4 : 0
5 : 0
6 : 0
7 : 0
45 : 0
4 : 0
5 : 0
23 : 0
k1 : 0

```

```
sudh : 0
k2 : 0
ineuron : 0
k3 : 0
kumar : 0
3 : 0
6 : 0
7 : 0
8 : 0
ineuron : 0
data science : 0
```

Q.11 Try to find out number of keys in dict element.

```
for i in l:
    if type(i)==dict:
        for k,v in i.items():
            if type(k)==int or type(k)==str:
                print( k , " : ", l.count(k))
```

```
O/P:  k1 : 0
      k2 : 0
      k3 : 0
      3 : 0
      7 : 0
```

Q.12 Try to filter all the string data

```
for i in l:
    if type(i)==list :
        for j in i:
            if type(j)==str:
                print(j)
    if type(i)==dict:
        for k,v in i.items():
            if type(k)==str or type(v)==str:
                print(k)
                print(v)
```

```
O/P : k1
      sudh
      k2
```

ineuron
k3
kumar
ineuron
data science

Q.14 Try to multiplication of all numeric data in the database

total=1

for i in range(0,len(l)):

total=total*[i]

print(" sum of all elements in given list:",total)

O/P:

sum of all elements in given list: 1
sum of all elements in given list: 2
sum of all elements in given list: 6
sum of all elements in given list: 24
sum of all elements in given list: 48
sum of all elements in given list: 144
sum of all elements in given list: 576
sum of all elements in given list: 2880
sum of all elements in given list: 17280
sum of all elements in given list: 51840
sum of all elements in given list: 207360
sum of all elements in given list: 1036800
sum of all elements in given list: 6220800
sum of all elements in given list: 43545600
sum of all elements in given list: 1959552000
sum of all elements in given list: 7838208000
sum of all elements in given list: 39191040000
sum of all elements in given list: 901393920000
sum of all elements in given list: 2704181760000
sum of all elements in given list: 16225090560000
sum of all elements in given list: 113575633920000
sum of all elements in given list: 908605071360000