In [1]:
```
"q1 :
    "ineruon \n",
    "ineruon ineruon \n",
    "ineruon ineruon ineruon\n",
    "ineruon ineruon ineruon ineruon\n",
    "\n",
    "q2 - \n",
    "\n",
    "         ineruon\n",
    "     ineruon      ineruon\n",
    "ineruon\t\tineruon \tineruon\n",
    "\tineruon\t\t ineruon\n",
    "\t\t  ineruon\n",
    "\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\" : \"ineuron\",\"k3\":\n",
    "            \"kumar\" , 3:6 , 7:8} , [\"ineuron\" , \"data science \"]]\n",
    "\n",
    "\n",
    "\"q3 : Try to extract all the list entity \n",
    "\"q4 : Try to extract all the dict enteties\n",
    "\"q5 : Try to extract all the tuples entities\n",
    "\"q6 : Try to extract all the numerical data it may b a part of dict key and values \n",
    "\"q7 : Try to give summation of all the numeric data \n",
    "\"q8 : Try to filter out all the odd values out all numeric data which is a part of a list \n",
    "\"q9 : Try to extract \"ineruon\" out of this data\n",
    "\"q10 :Try to find out a number of occurances of all the data \n",
    "\"q11 : Try to find out number of keys in dict element\n",
    "\"q12 : Try to filter out all the string data \n",
    "\"q13 : Try to Find  out alphanum in data\n",
    "\"q14 : Try to find out multiplication of all numeric value in  the individual collection inside dataset \n",
    "\"q15 : Try to unwrape all the collection inside collection and create a flat list \n",
    "\"    \n",
    "\"    \n",
    "\"before 29th may 2022 3 PM IST you have to send an answer to me or to shivan \n",
    "\"sudhanshu@ineuron.ai\n",
    "\"shivan@ineuron.ai"
```

```
 Input In [1]
    "q1 :
    ^
SyntaxError: EOL while scanning string literal
```

In [ ]:
```
# doubts- 9,10,11,12,13,14,15
```

In [3]:
```
# 1
d = "ineuron"
for i in range(5):
    for a in range(0, i+1):
        print("ineuron", end = " ")
    print("\n")
```

```
ineuron

ineuron ineuron

ineuron ineuron ineuron

ineuron ineuron ineuron ineuron

ineuron ineuron ineuron ineuron ineuron

```

In [4]:
```
# 2
a = int(input("Enter the number of rows-"))
for i in range(0,a):
    for b in range(0, a-i-1):
        print(end = " ")
    for b in range(0,i+1):
        print("ineuron", end = " ")
    print()
```

```
Enter the number of rows-5
    ineuron
   ineuron ineuron
  ineuron ineuron ineuron
 ineuron ineuron ineuron ineuron
ineuron ineuron ineuron ineuron ineuron
```

In [5]:
```
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" : "ineuron","k3": "kumar" , 3:6 , 7:8} , ["ineuron" , "data science "]]
```

In [6]:
```
# 3 "q3 : Try to extract all the list entity \n",
for i in l:
    print(i)
```

```
[1, 2, 3, 4]
(2, 3, 4, 5, 6)
(3, 4, 5, 6, 7)
{45, 4, 5, 23}
{'k1': 'sudh', 'k2': 'ineuron', 'k3': 'kumar', 3: 6, 7: 8}
['ineuron', 'data science ']
```

In [7]:
```
# "q4 : Try to extract all the dict enteties\n",
for i in l:
    if type(i) == dict:
        print(i)
```

```
{'k1': 'sudh', 'k2': 'ineuron', 'k3': 'kumar', 3: 6, 7: 8}
```

In [8]:
```
# "q5 : Try to extract all the tuples entities\n",
for i in l:
    if type(i) == tuple:
        print(i)
```

```
(2, 3, 4, 5, 6)
(3, 4, 5, 6, 7)
```

In [9]:
```
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" : "ineuron","k3": "kumar" , 3:6 , 7:8} , ["ineuron" , "data science "]]
# q6 : Try to extract all the numerical data it may b a part of dict key and value

for i in l:

    if type(i) == list or type(i) == tuple or type(i) == set:
        for j in i:
            if type(j) == int:
                print(j)
    if type(i) == dict:

        for k,v in i.items():
            if type(k) == int or type(v) == int:
                print(k)
                print(v)
```

```
1
2
3
4
2
3
4
5
6
3
4
5
6
7
45
4
5
23
3
6
7
8
```

In [10]:
```
 "q7 : Try to give summation of all the numeric data \n",
for i in l:
    if type(i) == list or type(i) == tuple or type(i) == set:
        for j in i:
            if type(j) == int:
                sum(j)
                print(j)
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Input In [10], in <cell line: 2>()
      4 for j in i:
      5     if type(j) == int:
----> 6         sum(j)
      7         print(j)

TypeError: 'int' object is not iterable
```

In [11]:
```
for i in l:
    if type(i) == list or type(i) == tuple or type(i) == set:
        for j in i:
            if type(j) == int:

                print(j)
```

```
1
2
3
4
2
3
4
5
6
3
4
5
6
7
45
4
5
23
```

In [12]:
```
variable=0
for i in l:
    if type(i) == list or type(i) == tuple or type(i) == set:
        for j in i:
            if type(j) == int:
                variable=variable+j
#                 print(variable)
#                 variable+=j

    if type(i) == dict:
        for k,v in i.items():
            if type(k) == int:
                variable+=k
            if type(v) == int:
                variable+=v
print(variable)
```

```
156
```

In [13]:
```
#"q8 : Try to filter out all the odd values out all numeric data which is a part of a list
for i in l:
    if type(i) == list or type(i) == set or type(i) == tuple:
        for j in i:
            if type(j) == int:
                if j % 2 !=0:
                    print(j)
    if type(i) == dict:
        for k,v in i.items():
            if type(k) == int or type(v) == int:
                if k %2!=0:
                    print(k)
                if v%2!=0:
                    print(v)
```

```
1
3
3
5
3
5
7
45
5
23
3
```

In [14]:
```
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" : "ineuron","k3": "kumar" , 3:6 , 7:8} , ["ineuron" , "data science "]]
#q9 : Try to extract \"ineruon\" out of this data
for i in l:
    if type(i) == list or type(i) == set or type(i) == tuple:
        for j in i:
            if type(j) == str:
                if j == "ineuron":
                    print(j)
    if type(i) == dict:
        for k,v in i.items():
            if type(k) == str:
                if (k) == "ineuron":
                    if type(v) == str:
                        if v == "ineuron":
                            print(k,v)
```

```
ineuron
```

In [15]:
```
    if type(i) == list or type(i) == set or type(i) == tuple:
        for j in i:
            if type(j) == str:
                if j == "ineuron":
                    print(j)
    if type(i) == dict:
        for k,v in i.items():
            if type(k) == str:
                if (k) == "ineuron":
                    if type(v) == str:
                        if v == "ineuron":
                            print(k,v)
```

```
ineuron
```

In [16]:
```
l1=[]
for i in l:
    if type(i)==dict:
        for j in i.values():
            if j=="ineuron":
                l1.append(j)
    elif type(i) == list:
        for j in i:
            if type(j) == "ineuron":
                l1.append(j)
print(l1)
```

```
['ineuron']
```

In [27]:
```
l1=[]
for i in l:
    if type(i)==dict:
        for j in i.values():
            if j=='ineuron':
                l1.append(j)
    elif type(i)==list:
        for j in i:
            if type(j)=='ineuron':
                l1.append(j)

print(l1)
```

```
['ineuron']
```

In [28]:
```
l
```

Out[28]:
```
[[1, 2, 3, 4],
 (2, 3, 4, 5, 6),
 (3, 4, 5, 6, 7),
 {4, 5, 23, 45},
 {'k1': 'sudh', 'k2': 'ineuron', 'k3': 'kumar', 3: 6, 7: 8},
 ['ineuron', 'data science ']]
```

In [29]:
```
# q10 :Try to find out a number of occurances of all the data
```

In [30]:
```
# q11 : Try to find out number of keys in dict element
print(len(i[5]))
```

```
2
```

In [31]:
```
i=l.keys(len(i[5]))
print(i)
```

```
---------------------------------------------------------------------------
AttributeError                            Traceback (most recent call last)
Input In [31], in <cell line: 1>()
----> 1 i=l.keys(len(i[5]))
      2 print(i)

AttributeError: 'list' object has no attribute 'keys'
```

In [32]:
```
# q12 : Try to filter out all the string data
for i in l:
    if type(str) in l:
        print(i)
```

In [ ]:
```
# q13 : Try to Find  out alphanum in data
```

In [ ]:
```
# q14 : Try to find out multiplication of all numeric value in  the individual collection inside dataset
```

In [ ]:
```
# q15 : Try to unwrape all the collection inside collection and create a flat list
```

In [ ]:

In [ ]: