Q1 : Remove empty strings from the list of strings having values Fingertips,"",data,"",Intelligence,"",Solutions.

In [5]:
```
li=["fingertips","data","intelligence","solutions"]
for i in li:
    if i =="":
        li.remove(i)
```

In [6]:
```
li
```

Out[6]:
```
['fingertips', 'data', 'intelligence', 'solutions']
```

Result = ['Fingertips', 'Data', 'Intelligence', 'Solutions']

In [8]:
```
list(filter(None,li))
```

Out[8]:
```
['fingertips', 'data', 'intelligence', 'solutions']
```

Q2 : Add item 7000 after 6000 in the following Python List List = [10, 20, [300, 400, [5000, 6000], 500], 30, 40]

In [14]:
```
list=[10, 20, [300, 400, [5000, 6000], 500], 30, 40]
list[2][2].append(7000)
```

In [2]:
```
Result = [10, 20, [300, 400, [5000, 6000, 7000], 500], 30, 40]
```

In [15]:
```
list
```

Out[15]:
```
[10, 20, [300, 400, [5000, 6000, 7000], 500], 30, 40]
```

Q3 : Given a Python list, remove the first occurrence of 20 from the list having values 5, 20, 15, 20, 25, 50, 20

In [1]:
```
l=[5, 20, 15, 20, 25, 50, 20]
```

In [2]:
```
b=l.index(20)
```

In [3]:
```
l.pop(b)
```

Out[3]:
```
20
```

In [24]:
```
Result = [5, 15, 20, 25, 50, 20]
```

Q4 : Given the list L1 = ['a','b','c'] create a list having the 3 elements which contains the given. list (list of list)

In [9]:
```
l1=['a','b','c']
l2=[l1]*3
#
```

In [11]:
```
l2.append(l1)
```

In [12]:
```
l2
```

Out[12]:
```
[['a', 'b', 'c'], ['a', 'b', 'c'], ['a', 'b', 'c'], ['a', 'b', 'c']]
```

Result = [['a', 'b', 'c'], ['a', 'b', 'c'], ['a', 'b', 'c']]

Q5 : Below are the two lists convert it into the dictionary.

keys = ['one', 'two', 'three']

values = [1, 2, 3]

In [19]:
```
keys = ['one', 'two', 'three']

values = [1, 2, 3]
```

In [25]:
```
dic={}
dic.fromkeys(keys,values)
```

Out[25]:
```
{'one': [1, 2, 3], 'two': [1, 2, 3], 'three': [1, 2, 3]}
```

In [26]:
```
zip(keys,values)
```

Out[26]:
```
<zip at 0x1ee062edf00>
```

In [27]:
```
dict(zip(keys,values))
```

Out[27]:
```
{'one': 1, 'two': 2, 'three': 3}
```

Resul = {'one': 1, 'two': 2, 'three': 3}

Q6 : Merge following two Python dictionaries into one dict1 = {'Ten': 10, 'Twenty': 20, 'Thirty': 30} dict2 = {'Thirty': 30, 'Fourty': 40, 'Fifty': 50}

In [14]:
```
dict1 = {'Ten': 10, 'Twenty': 20, 'Thirty': 30}
dict2 = {'Thirty': 30, 'Fourty': 40, 'Fifty': 50}
dict3 = {**dict1,**dict2}
```

In [15]:
```
dict3
```

Out[15]:
```
{'Ten': 10, 'Twenty': 20, 'Thirty': 30, 'Fourty': 40, 'Fifty': 50}
```

In [16]:
```
dict1.update(dict2)
```

In [18]:
```
dict1
```

Out[18]:
```
{'Ten': 10, 'Twenty': 20, 'Thirty': 30, 'Fourty': 40, 'Fifty': 50}
```

Resul = {'Ten': 10, 'Twenty': 20, 'Thirty': 30, 'Fourty': 40, 'Fifty': 50}

Q7 : Access the value of key 'history'

dict1 = { "class":{ "student":{ "name":"Mike","marks":{ "physics":70,"history":80 } } } }

In [32]:
```
dict1 = { "class":{ "student":{ "name":"Mike","marks":{ "physics":70,"history":80 } } } }
```

In [33]:
```
dict1
```

Out[33]:
```
{'class': {'student': {'name': 'Mike',
   'marks': {'physics': 70, 'history': 80}}}}
```

In [35]:
```
print(dict1['class']['student']['marks']['history'])
```

```
80
```

Result = 80

Q8 : Rename key city to location in the following dictionary.

dict1 = { "name": "Akshay", "age":25, "salary": 80000, "city": "Mumbai"}

In [46]:
```
dict1 = { "name": "Akshay", "age":25, "salary": 80000, "city": "Mumbai"}
```

In [47]:
```
dict1
```

Out[47]:
```
{'name': 'Akshay', 'age': 25, 'salary': 80000, 'city': 'Mumbai'}
```

In [48]:
```
dict1.pop("city")
```

Out[48]:
```
'Mumbai'
```

In [53]:
```
dict1["location"]='mumbai'
```

In [ ]:
```
dict1["location"]=dict1.pop("city")
```

In [54]:
```
dict1
```

Out[54]:
```
{'name': 'Akshay', 'age': 25, 'salary': 80000, 'location': 'mumbai'}
```

Result = {'name': 'Akshay', 'age': 25, 'salary': 80000, 'location': 'Mumbai'}

In [ ]:
```

```

Q9 : Get the key corresponding to the minimum value from the following dictionary.

dict1 = { 'Physics': 82, 'Math': 65, 'Chemistry': 75}

In [28]:
```
dict1 = { 'Physics': 82, 'Math': 65, 'Chemistry': 75}
```

In [31]:
```
min(dict1,key=dict1.get)
```

Out[31]:
```
'Math'
```

Result = Math

Q10 : Given a Python dictionary, Change Akshay's salary to 85000.

dict1 = { 'emp1': {'name': 'Jay', 'salary': 75000}, 'emp2': {'name': 'Akshay', 'salary': 80000}, 'emp3': {'name': 'Hrishikesh', 'salary': 65000} }

In [ ]:
```
dict1 = { 'emp1': {'name': 'Jay', 'salary': 75000}, 'emp2': {'name': 'Akshay', 'salary': 80000}, 'emp3': {'name': 'Hris
```

Result = {'emp1': {'name': 'Jay', 'salary': 75000}, 'emp2': {'name': 'Akshay', 'salary': 80000}, 'emp3': {'name': 'Hrishikesh', 'salary': 85000}}

In [ ]:

In [ ]: