

In [36]:

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# Q1. Write a Python program to filter the height and width of students, which are stored in a dictionary.
def filter(student):
    result={k:s for k,s in student.items() if s[0]>=6.0 and s[1]>=70}
    return result
student = {'Cierra Vega': (6.2, 70), 'Alden Cantrell': (5.9, 65), 'Kierra Gentry': (6.0, 68), 'Pierre Cox': (5.8, 66)}
print("orginiall dict")
print(student)
print("Height > 6ft and Weight> 70kg:")
print(filter(student))
```

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orginiall dict
{'Cierra Vega': (6.2, 70), 'Alden Cantrell': (5.9, 65), 'Kierra Gentry': (6.0, 68), 'Pierre Cox': (5.8, 66)}
Height > 6ft and Weight> 70kg:
{'Cierra Vega': (6.2, 70)}
```

In [45]:

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# Q2. Write a Python program to convert more than one List to nested dictionary.
key=["a","b","c"]
value=[4,5,6]
extra=["x","y","z"]
nested_values=zip(key,value,extra)
dict_1=dict((x[0],x[1:]) for x in nested_values)
print(dict_1)
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{'a': (4, 'x'), 'b': (5, 'y'), 'c': (6, 'z')}
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In [55]:

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# Q3. Write a Python program to filter a dictionary based on values
student = {'Cierra Vega': (6.2, 70), 'Alden Cantrell': (5.9, 65), 'Kierra Gentry': (6.0, 68), 'Pierre Cox': (5.8, 66)}
print(student)
result={key:value for (key,value)in student.items() if value[1]>=70}
print(result)
```

```
{'Cierra Vega': (6.2, 70), 'Alden Cantrell': (5.9, 65), 'Kierra Gentry': (6.0, 68), 'Pierre Cox': (5.8, 66)}
{'Cierra Vega': (6.2, 70)}
```

In [66]:

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#Q4. Write a Python program to drop empty Items from a given Dictionary
student = {"Name": "Pooja", "Age":23, "Gender": None, "Mark":488, "City": None}
result={}
for (key,value) in student.items():
    if value is not None:
        result.update({key:value})
print(result)
```

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{'Name': 'Pooja', 'Age': 23, 'Mark': 488}
```

In [71]:

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#Q5. Write a Python program to create a dictionary of keys x, y, and z where each key has as value a List from 11-20, 21-30, 31-40 respectively.
from pprint import pprint
dic=dict(x=list(range(11,20)),y=list(range(21,30)),z=list(range(31,40)))
print(dic)
print(dic["x"][4])
print(dic["y"][4])
print(dic["z"][4])
for k,v in dic.items():
    print(k,"has value",v)
```

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{'x': [11, 12, 13, 14, 15, 16, 17, 18, 19], 'y': [21, 22, 23, 24, 25, 26, 27, 28, 29], 'z': [31, 32, 33, 34, 35, 36, 37, 38, 39]}
15
25
35
x has value [11, 12, 13, 14, 15, 16, 17, 18, 19]
y has value [21, 22, 23, 24, 25, 26, 27, 28, 29]
z has value [31, 32, 33, 34, 35, 36, 37, 38, 39]
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In []: