Question 1 :

In [4]:
```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

Question 2 :

In [2]:
```
dataset = pd.read_csv('covid19.csv')
dataset
```

Out[2]:

	Country/Region	Confirmed	Deaths	Recovered	Active	New cases	New deaths	New recovered	Deaths / 100 Cases	Recovered / Cases
0	Afghanistan	36263	1269	25198	9796	106	10	18	3.50	69.49
1	Albania	4880	144	2745	1991	117	6	63	2.95	56.25
2	Algeria	27973	1163	18837	7973	616	8	749	4.16	67.34
3	Andorra	907	52	803	52	10	0	0	5.73	88.53
4	Angola	950	41	242	667	18	1	0	4.32	25.47
...	...	...	...	...	...	...	...	...	...	...
182	West Bank and Gaza	10621	78	3752	6791	152	2	0	0.73	35.33
183	Western Sahara	10	1	8	1	0	0	0	10.00	80.00
184	Yemen	1691	483	833	375	10	4	36	28.56	49.26
185	Zambia	4552	140	2815	1597	71	1	465	3.08	61.85
186	Zimbabwe	2704	36	542	2126	192	2	24	1.33	20.04

187 rows × 15 columns

Question 3 :

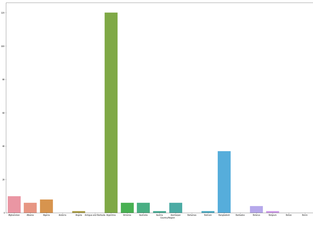
In [5]:
```
fig, ax = plt.subplots(figsize=(20,10))
maroc = dataset[dataset['Country/Region'] == 'Morocco']
sns.barplot(data=maroc[['Confirmed', 'Deaths', 'Recovered', 'Active', 'New cases',
```

Out[5]:

Question 4 :

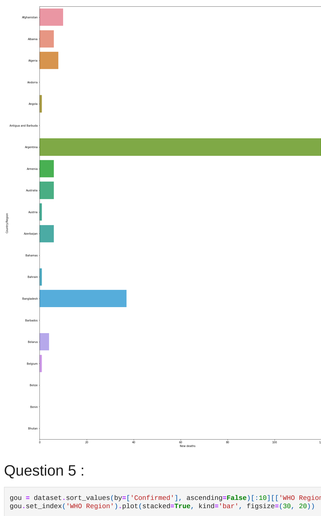
Vertical :

In [9]:
```
fig, ax = plt.subplots(figsize=(30,20))
sns.barplot(x='Country/Region', y='New deaths', data=dataset[:20], orient='v')
```

Out[9]:


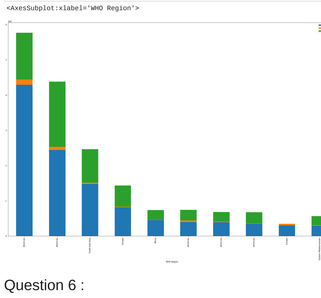
Horizontale :

In [11]:
```
fig, ax = plt.subplots(figsize=(20,30))
sns.barplot(y='Country/Region', x='New deaths', data=dataset[:20], orient='h')
```

Out[11]:


Question 5 :

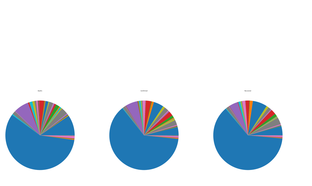
In [19]:
```
gou = dataset.sort_values(by=['Confirmed'], ascending=False)[:10][['WHO Region',
gou.set_index('WHO Region').plot(stacked=True, kind='bar', figsize=(30, 20))
```

Out[19]:


Question 6 :

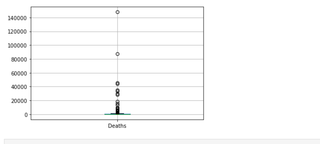
In [21]:
```
data_afrique = dataset[dataset['WHO Region'] == 'Africa']

fig, ax = plt.subplots(1,3,figsize=(50,40))
ax[0].set_title('Deaths')
ax[0].pie(data_afrique['Deaths'])

ax[1].set_title('Comfirmed')
ax[1].pie(data_afrique['Confirmed'])

ax[2].set_title('Recovered')
ax[2].pie(data_afrique['Recovered'])
fig.legend(data_afrique['Country/Region'])
```

Out[21]:
```
<matplotlib.legend.Legend at 0x1266e887400>
```



Question 7 :

In [22]:
```
dataset.boxplot('Deaths')
```

Out[22]:


In [ ]: