In [1]:

```python
print("Name : Jas")
print("This is a CSV of more than 200 rows which has Covide data.")
print("The task is to find out top 5 the countries who are least affected by covid")
print("Another task is to find out top 5 the countries who has the maximum number of deaths
print("Another task is to find out top 5 the countries who has the maximum number of active
```

```
Name : Jas
This is a CSV of more than 200 rows which has Covide data.
The task is to find out top 5 the countries who are least affected by covid
Another task is to find out top 5 the countries who has the maximum number o
f deaths
Another task is to find out top 5 the countries who has the maximum number o
f active cases
```

In [2]:

```python
#Covide Data
import  numpy as np
import pandas as pd
from matplotlib import pyplot as plt


dataframe = pd.read_csv('covid19.csv')
df = dataframe.dropna()
df
```

Out[2]:

	country	total_cases	new_cases	total_deaths	new_deaths	total_recovered	active_cases
0	USA	1621196	294	96359	5.0	382244	1142593
1	Russia	326448	8894	3249	150.0	99825	223374
2	Brazil	310921	0	20082	0.0	125960	164879
3	Spain	280117	0	27940	0.0	196958	55219
4	UK	250908	0	36042	0.0	1918	212948
...	...	...	...	...	...	...	...
208	St. Barth	6	0	0	0.0	6	0
209	Western Sahara	6	0	0	0.0	6	0
210	Anguilla	3	0	0	0.0	3	0
211	Lesotho	1	0	0	0.0	0	1
212	Saint Pierre Miquelon	1	0	0	0.0	1	0

213 rows × 10 columns

In [65]:

```python
#Task 1
#Sort the data as per total number of cases

sorted_dataframe_total_cases=df.sort_values(by=['total_cases'])
sorted_dataframe_total_cases
```

Out[65]:

	country	total_cases	new_cases	total_deaths	new_deaths	total_recovered	active_cas
212	Saint Pierre Miquelon	1	0	0	0.0	1	
211	Lesotho	1	0	0	0.0	0	
210	Anguilla	3	0	0	0.0	3	
207	Caribbean Netherlands	6	0	0	0.0	6	
209	Western Sahara	6	0	0	0.0	6	
...	...	...	...	...	...	...	
4	UK	250908	0	36042	0.0	1918	2129
3	Spain	280117	0	27940	0.0	196958	552
2	Brazil	310921	0	20082	0.0	125960	1648
1	Russia	326448	8894	3249	150.0	99825	2233
0	USA	1621196	294	96359	5.0	382244	11425

213 rows × 10 columns

In [70]:

```python
#Task 2
#Get top 5 countries who has the least number of cases and plot a bar graph

total_number_of_cases=sorted_dataframe_total_cases['total_cases']
least_cases_value_5=total_number_of_cases.head(5)

country_with_least_cases=sorted_dataframe_total_cases['country']
least_cases_country_5=country_with_least_cases.head(5)

print(least_cases_value_5)
print(least_cases_country_5)

plt.xlabel("Total Cases")
plt.xticks(rotation='vertical')
plt.ylabel("Country")

country=least_cases_country_5
cases=least_cases_value_5
plt.bar(country,cases,width=0.4,color=('pink','yellow','red','green','blue'))
```

```
212     1
211     1
210     3
207     6
209     6
Name: total_cases, dtype: int64
212     Saint Pierre Miquelon
211                   Lesotho
210                  Anguilla
207     Caribbean Netherlands
209            Western Sahara
Name: country, dtype: object
```
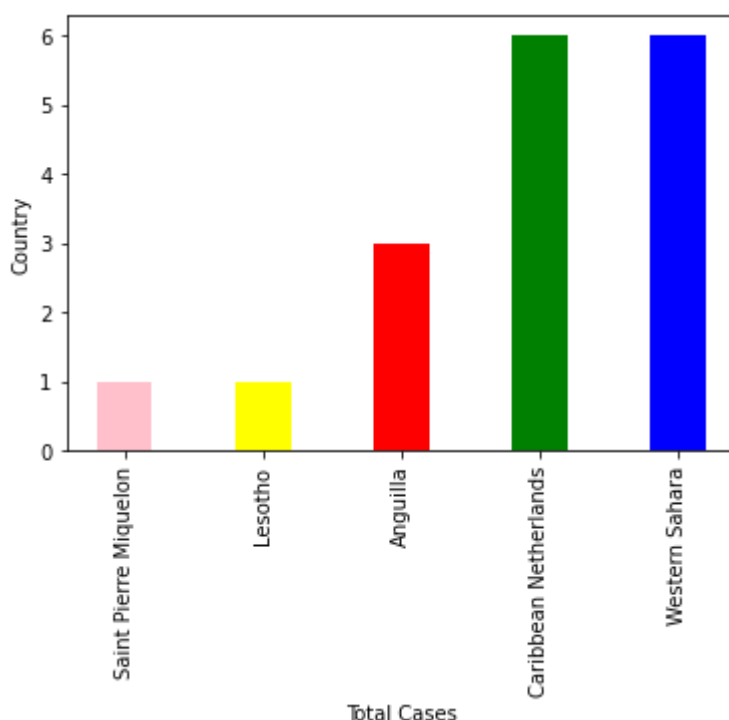
Out[70]:

```
<BarContainer object of 5 artists>
```

In [75]:

```python
#Task 3
#Sort the data as per total number of deaths

sorted_dataframe_total_deaths=df.sort_values(by=['total_deaths'])
sorted_dataframe_total_deaths
```

Out[75]:

	country	total_cases	new_cases	total_deaths	new_deaths	total_recovered	active_cases
212	Saint Pierre Miquelon	1	0	0	0.0	1	0
190	Fiji	18	0	0	0.0	15	3
188	Laos	19	0	0	0.0	14	5
132	CAR	436	0	0	0.0	18	418
187	Bhutan	21	0	0	0.0	6	15
...	...	...	...	...	...	...	...
3	Spain	280117	0	27940	0.0	196958	55219
6	France	181826	0	28215	0.0	63858	89753
5	Italy	228006	0	32486	0.0	134560	60960
4	UK	250908	0	36042	0.0	1918	212948
0	USA	1621196	294	96359	5.0	382244	1142593

213 rows × 10 columns

In [80]:

```python
#Task 4
#Get top 5 countries who has the maximum number of deaths and plot a bar graph

total_number_of_deaths=sorted_dataframe_total_deaths['total_deaths']
most_deaths_value_5=total_number_of_deaths.tail(5)

country_with_most_deaths=sorted_dataframe_total_deaths['country']
most_deaths_country_5=country_with_most_deaths.tail(5)

print(most_deaths_value_5)
print(most_deaths_country_5)

plt.xlabel("Total deaths")
plt.xticks(rotation='vertical')
plt.ylabel("Country")

country=most_deaths_country_5
deaths=most_deaths_value_5
plt.bar(country,deaths,width=0.4,color=('pink','yellow','red','green','blue'))
```
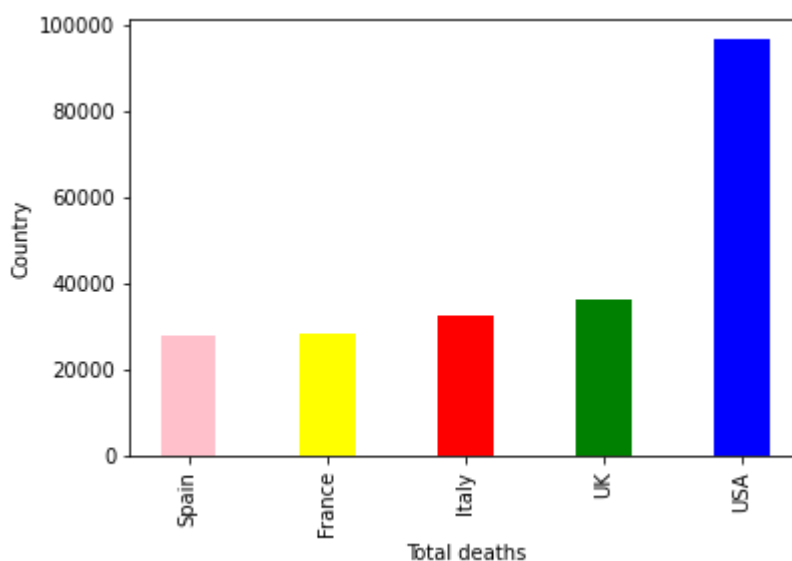
```
3      27940
6      28215
5      32486
4      36042
0      96359
Name: total_deaths, dtype: int64
3      Spain
6      France
5      Italy
4         UK
0        USA
Name: country, dtype: object
```

Out[80]:

```
<BarContainer object of 5 artists>
```

In [85]:

```python
#Task 5
#Sort the data as per active cases

sorted_dataframe_active_cases=df.sort_values(by=['active_cases'])
sorted_dataframe_active_cases
```

Out[85]:

	country	total_cases	new_cases	total_deaths	new_deaths	total_recovered	active_cases
212	Saint Pierre Miquelon	1	0	0	0.0	1	0
180	Eritrea	39	0	0	0.0	39	0
192	New Caledonia	18	0	0	0.0	18	0
193	Saint Lucia	18	0	0	0.0	18	0
177	Macao	45	0	0	0.0	45	0
...	...	...	...	...	...	...	..
6	France	181826	0	28215	0.0	63858	89753
2	Brazil	310921	0	20082	0.0	125960	164879
4	UK	250908	0	36042	0.0	1918	212948
1	Russia	326448	8894	3249	150.0	99825	223374
0	USA	1621196	294	96359	5.0	382244	1142593

213 rows × 10 columns

In [89]:

```python
#Task 6
#Get top 5 countries who has the maximum number of active cases and plot a bar graph

total_number_of_active_cases=sorted_dataframe_active_cases['active_cases']
most_active_cases_value_5=total_number_of_active_cases.tail(5)

country_with_most_active_cases=sorted_dataframe_active_cases['country']
most_active_cases_country_5=country_with_most_active_cases.tail(5)

print(most_active_cases_value_5)
print(most_active_cases_country_5)

plt.xlabel("Total Active Cases")
plt.xticks(rotation='vertical')
plt.ylabel("Country")

country=most_active_cases_country_5
active_cases=most_active_cases_value_5
plt.bar(country,active_cases,width=0.4,color=('pink','yellow','red','green','blue'))
```
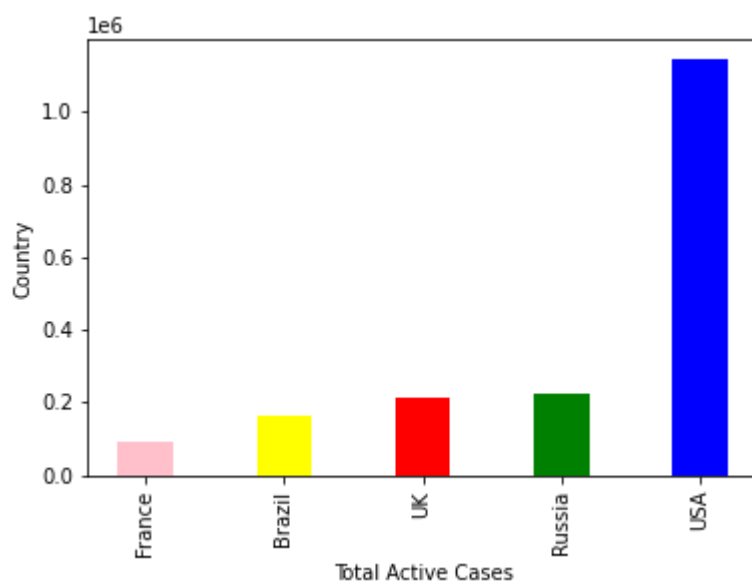
```
6        89753
2       164879
4       212948
1       223374
0      1142593
Name: active_cases, dtype: int64
6       France
2       Brazil
4           UK
1       Russia
0          USA
Name: country, dtype: object
```

Out[89]:

```
<BarContainer object of 5 artists>
```


In [ ]:

In [ ]: