In [1]:

```
import numpy as np
import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt
import warnings
warnings.filterwarnings('ignore')
```

In [3]:

```
height_data = pd.read_csv("Height.csv")
```

In [4]:

```
height_data.head()
```

Out[4]:

	Rank	Country Name	Male Height in Cm	Female Height in Cm	Male Height in Ft	Female Height in Ft
0	1	Netherlands	183.78	170.36	6.03	5.59
1	2	Montenegro	183.30	169.96	6.01	5.58
2	3	Estonia	182.79	168.66	6.00	5.53
3	4	Bosnia and Herzegovina	182.47	167.47	5.99	5.49
4	5	Iceland	182.10	168.91	5.97	5.54

In [5]:

```
height_data.tail()
```

Out[5]:

	Rank	Country Name	Male Height in Cm	Female Height in Cm	Male Height in Ft	Female Height in Ft
194	195	Mozambique	164.30	155.42	5.39	5.10
195	196	Papua New Guinea	163.10	156.89	5.35	5.15
196	197	Solomon Islands	163.07	156.79	5.35	5.14
197	198	Laos	162.78	153.10	5.34	5.02
198	199	Timor-Leste	160.13	152.71	5.25	5.01

In [6]:

```
height_data.shape
```

Out[6]:

```
(199, 6)
```

In [7]:

```
height_data.columns
```

Out[7]:

```
Index(['Rank', 'Country Name', 'Male Height in Cm', 'Female Height in Cm',
       'Male Height in Ft', 'Female Height in Ft'],
      dtype='object')
```

In [8]:

```
height_data.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 199 entries, 0 to 198
Data columns (total 6 columns):
 #   Column               Non-Null Count  Dtype  
---  ------               --------------  -----  
 0   Rank                 199 non-null    int64  
 1   Country Name         199 non-null    object 
 2   Male Height in Cm    199 non-null    float64
 3   Female Height in Cm  199 non-null    float64
 4   Male Height in Ft    199 non-null    float64
 5   Female Height in Ft  199 non-null    float64
dtypes: float64(4), int64(1), object(1)
memory usage: 9.5+ KB
```

In [9]:

```
height_data.describe()
```

Out[9]:

	Rank	Male Height in Cm	Female Height in Cm	Male Height in Ft	Female Height in Ft
count	199.000000	199.000000	199.000000	199.000000	199.000000
mean	100.000000	173.089045	160.942915	5.678794	5.280402
std	57.590508	4.949832	4.076377	0.162510	0.133870
min	1.000000	160.130000	150.910000	5.250000	4.950000
25%	50.500000	169.490000	158.240000	5.560000	5.190000
50%	100.000000	173.530000	160.620000	5.690000	5.270000
75%	149.500000	176.510000	163.870000	5.790000	5.375000
max	199.000000	183.780000	170.360000	6.030000	5.590000

In [10]:

```
height_data.isnull().sum()
```

Out[10]:

```
Rank                   0
Country Name           0
Male Height in Cm      0
Female Height in Cm    0
Male Height in Ft      0
Female Height in Ft    0
dtype: int64
```

In [11]:

```
height_data.drop(['Male Height in Ft', 'Female Height in Ft'],axis = 1)
```

Out[11]:

	Rank	Country Name	Male Height in Cm	Female Height in Cm
0	1	Netherlands	183.78	170.36
1	2	Montenegro	183.30	169.96
2	3	Estonia	182.79	168.66
3	4	Bosnia and Herzegovina	182.47	167.47
4	5	Iceland	182.10	168.91
...	...	...	...	...
194	195	Mozambique	164.30	155.42
195	196	Papua New Guinea	163.10	156.89
196	197	Solomon Islands	163.07	156.79
197	198	Laos	162.78	153.10
198	199	Timor-Leste	160.13	152.71

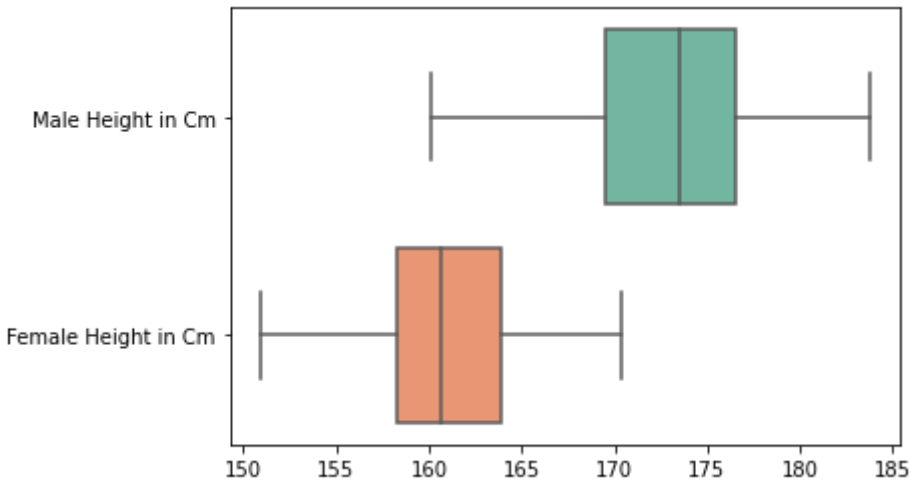
199 rows × 4 columns

In [17]:

```
sns.boxplot(data = height_data.loc[:,['Male Height in Cm', 'Female Height in Cm']],
            orient = 'h', palette = 'Set2')
```

Out[17]:

<AxesSubplot:>

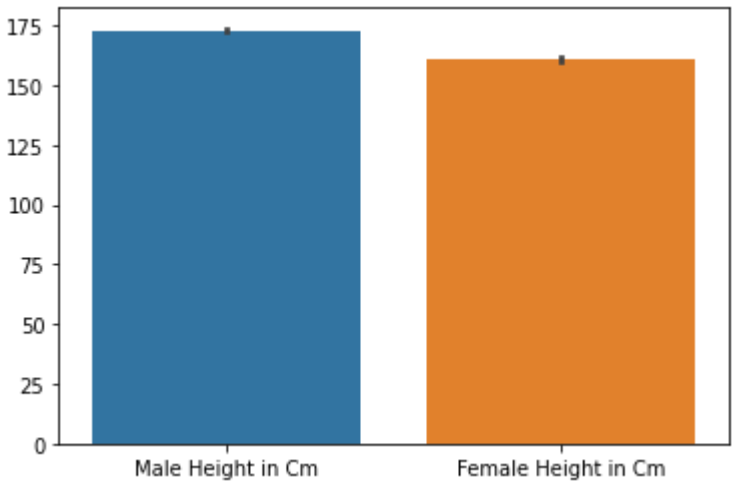


In [18]:

```
sns.barplot(data = height_data.loc[:,['Male Height in Cm', 'Female Height in Cm']])
```

Out[18]:

<AxesSubplot:>



In [22]:

```
avg_height_male = height_data['Male Height in Cm'].mean()
```

In [23]:

```
avg_height_male
```

Out[23]:

```
173.08904522613065
```

In [24]:

```
avg_height_female = height_data['Female Height in Cm'].mean()
```

In [25]:

```
avg_height_female
```

Out[25]:

```
160.9429145728643
```

In [26]:

```
max_height_male = height_data['Male Height in Cm'].idxmax()
max_height_country =height_data['Country Name'][max_height_male]
print(f"The tallest Male or height of male is :{max_height_country} at {height_data['Ma
```

```
The tallest Male or height of male is :Netherlands at 183.78
```

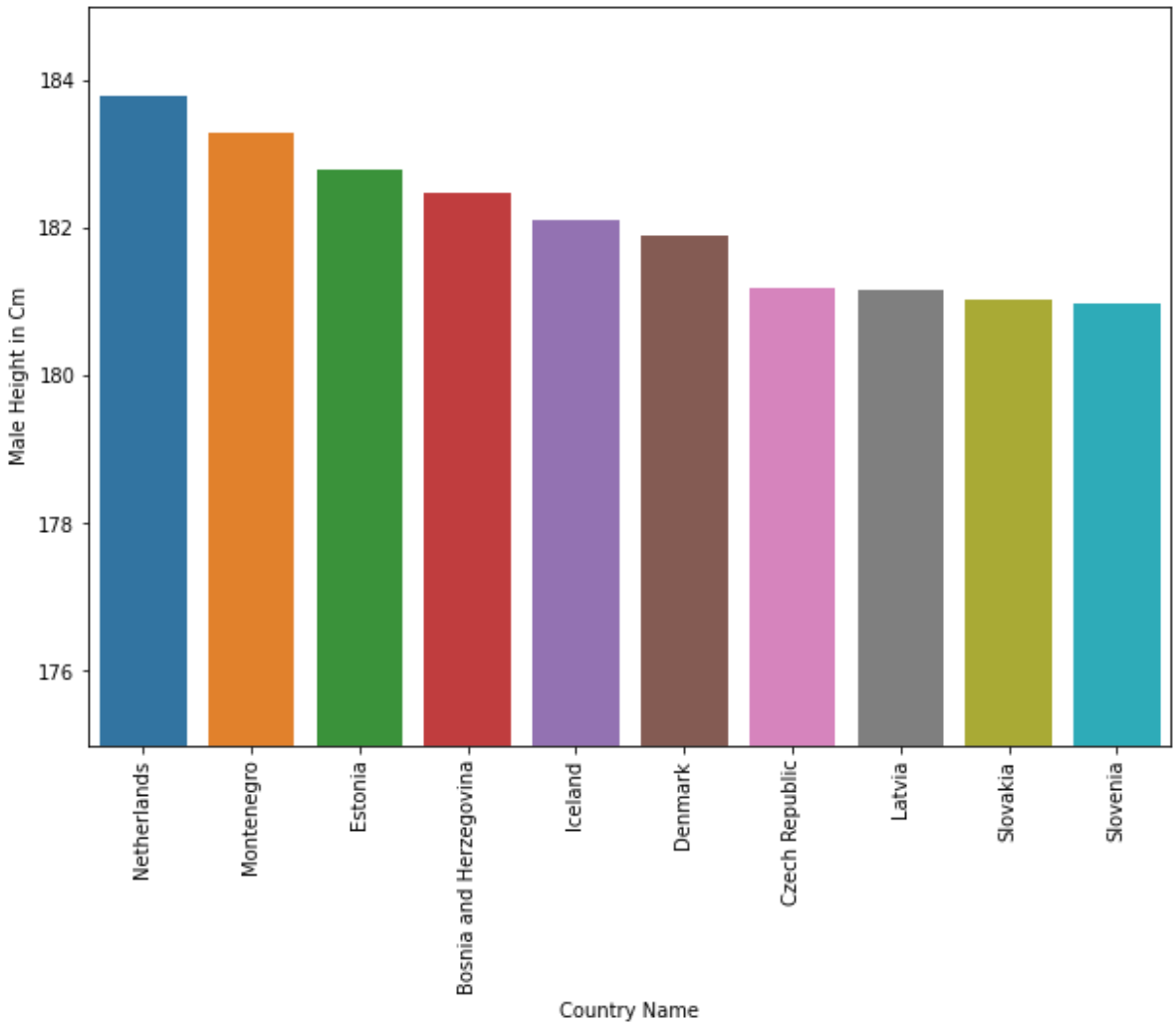
In [40]:

```
max_height_female = height_data['Female Height in Cm'].idxmax()
max_height_country_female =height_data['Country Name'][max_height_female]
print(f"The tallest female or height of female is :{max_height_country_female} at {heigh
```

```
The tallest female or height of female is :Netherlands at 170.36
```

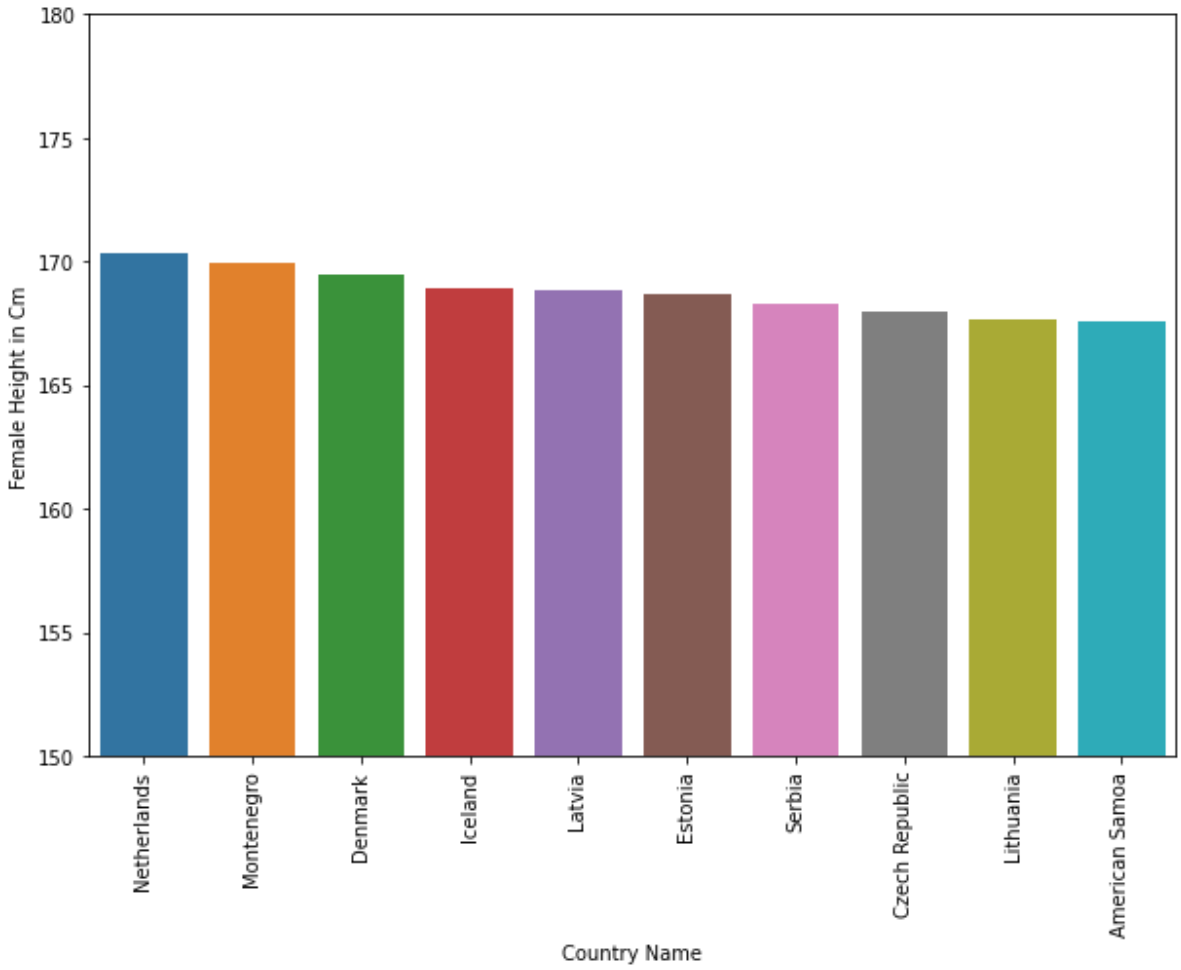
In [31]:

```
plt.figure(figsize=(10,7))
max_height = height_data.sort_values('Male Height in Cm',ascending=False).head(10)
sns.barplot(x='Country Name',y = max_height['Male Height in Cm'],data = max_height)
plt.ylim(ymax=185,ymin=175)
plt.xticks(rotation = 90)
plt.show()
```



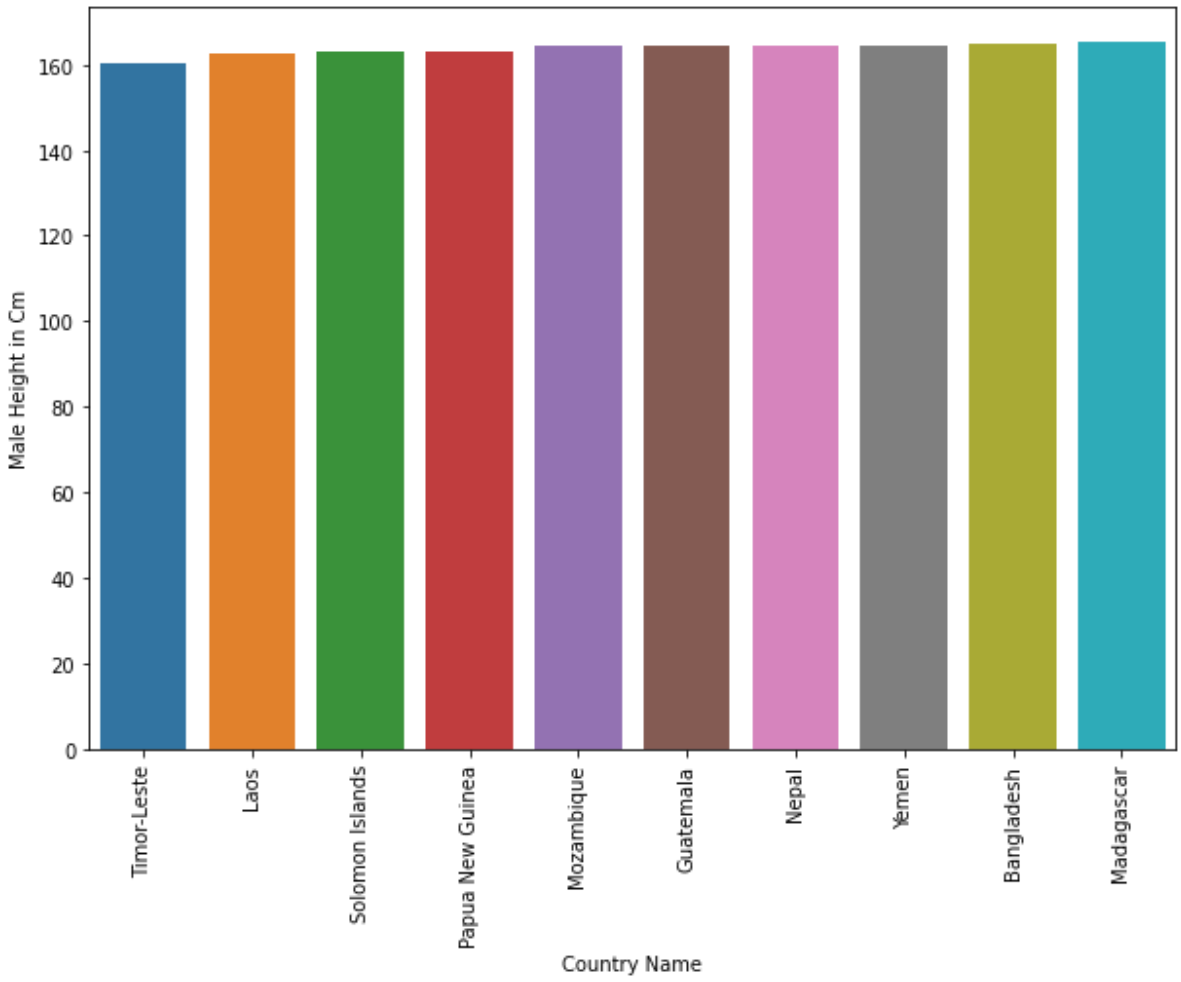
In [35]:

```
plt.figure(figsize=(10,7))
max_height_female = height_data.sort_values('Female Height in Cm',ascending=False).head(
sns.barplot(x='Country Name',y = height_data['Female Height in Cm'],data = max_height_fe
plt.ylim(ymax=180,ymin=150)
plt.xticks(rotation = 90)
plt.show()
```



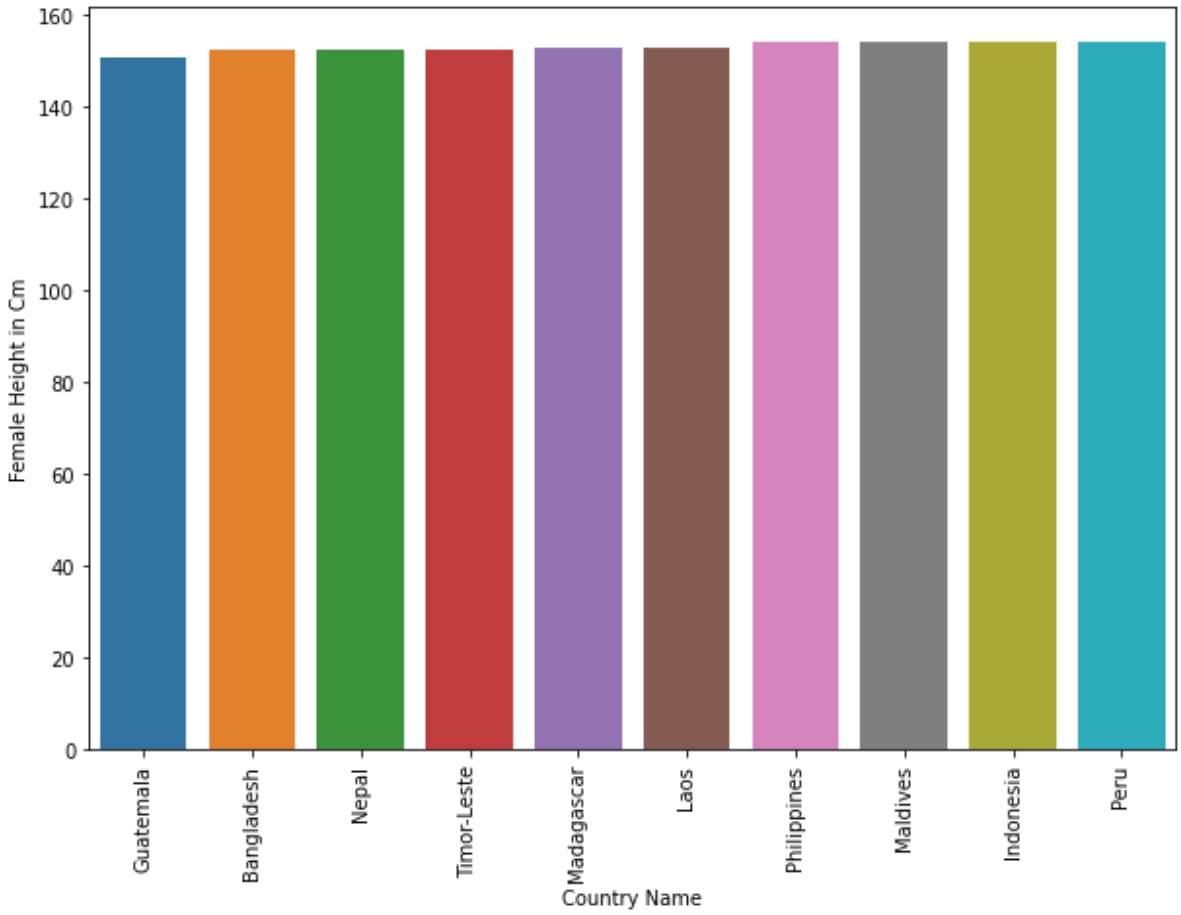
In [36]:

```
plt.figure(figsize=(10,7))
min_height = height_data.sort_values('Male Height in Cm',ascending=True).head(10)
sns.barplot(x='Country Name',y = min_height['Male Height in Cm'],data = min_height)
plt.xticks(rotation = 90)
plt.show()
```



In [37]:

```
plt.figure(figsize=(10,7))
min_height_female = height_data.sort_values('Female Height in Cm',ascending=True).head(1
sns.barplot(x='Country Name',y = min_height_female['Female Height in Cm'],data = min_hei
plt.xticks(rotation = 90)
plt.show()
```



In [38]:

```
min_height_male = height_data['Male Height in Cm'].idxmin()
min_height_country =height_data['Country Name'][min_height_male]
print(f"The smallest Male or height of male is :{min_height_country} at {height_data['Ma
```

```
The smallest Male or height of male is :Timor-Leste at 160.13
```

In [39]:

```
min_height_female = height_data['Female Height in Cm'].idxmin()
min_height_country_female =height_data['Country Name'][min_height_female]
print(f"The smallest Female or height of female is :{min_height_country} at {height_data
```

```
The smallest Female or height of female is :Timor-Leste at 150.91
```