

## Majyhain, Average Height of Male and Female by Country 2022, Kaggle Dataset, February 02, 2022."

### About Dataset

### Context

This dataset is about Average Height of Male and Female by Country 2022. It has in it the height of both genders (male and female) in metric feet and centimeter. Also has column stating the country names and a column for ranking.

### Content

The dataset contains six columns:

- Rank
- Country Name
- Male height in Cm
- Female height in Cm
- Male height in Ft
- Female height in Ft

### References:

The Data is collected from the following sites:

<https://ourworldindata.org/>

```
In [3]: # Checking the data information
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
```

The Image above shows the general information of the dataset, showing that we have 199 entries (rows) and 6 total columns. The data types are shown and we have no missing data on the dataset.

```
In [4]: # checking the statistical summary of the dataset
data.describe()

Out[4]:
```

	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

The table above shows the statistical summary of the dataset stating the count, mean, standard deviation, min and the max of each numerical columns.

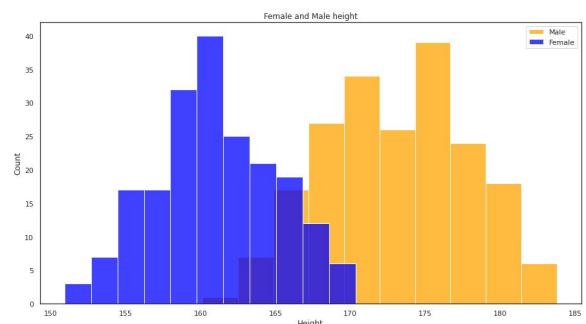
```
In [7]: data.drop([data.columns[-1], data.columns[-2]], axis=1, inplace=True)
data.columns = ['Rank', 'Country', 'Male', 'Female']

In [8]: data.head()

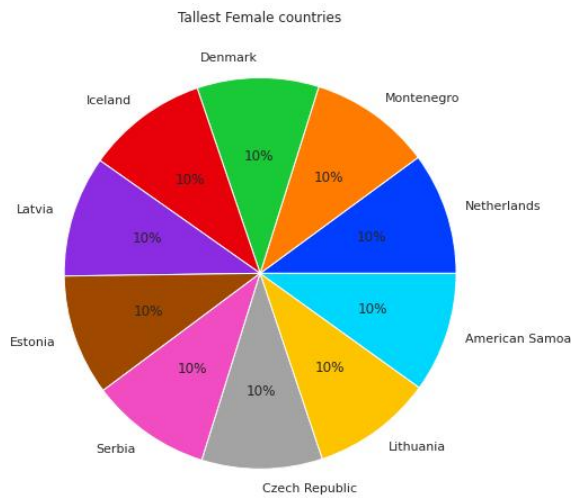
Out[8]:
```

	Rank	Country	Male	Female
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

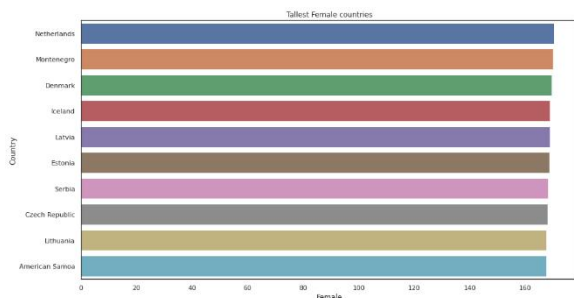
The height are being represented in feet and cm, since they both represent the same information, the height in cm is being dropped and kept the measures in feet. The columns names are being replaced with Male and Female for each of the gender heights columns.



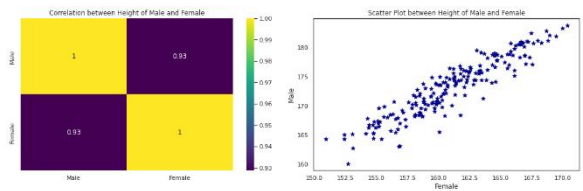
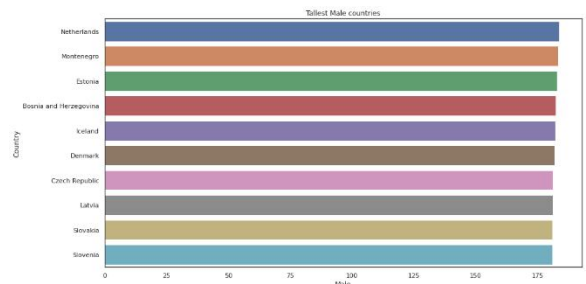
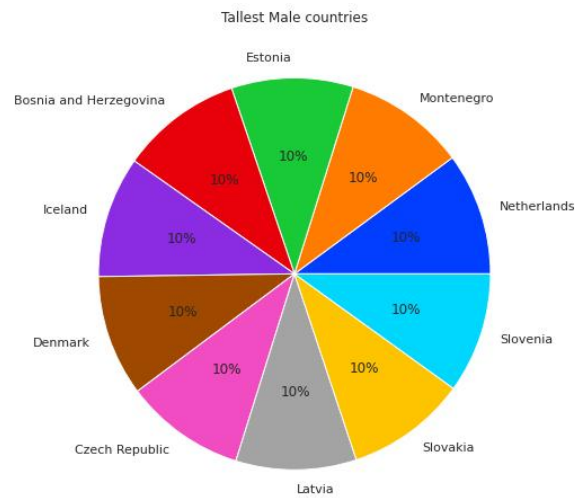
The figure above shows the histogram merge plot of both the male and female distribution height, so there is mild change in ratio, but in acceptable level (the ratio ranges from 30.45 to 30.51)



The figure above shows the pie chart plot of the top 10 tallest female countries ranging from Netherlands down to American samoa. The figure below shows the bar chart representation of it.



The figure below shows the pie chart plot of the top 10 tallest male countries ranging from Netherlands down to Slovenia. The bar chart representation is shown below as well.



The figure above shows both the correlation and scattered plot representation of the both the male and female height. no surprise, there is exceedingly high correlation between height of male and female. Hence, the country with high average male height is likely to have high mean female's height.

In conclusion, Netherlands and Montenegro are the two countries with the tallest average height of both Male and Female, Timor-Leste is the country with the shortest average height of Male and Guatemala is the country with the shortest average height of Female. Timor-Leste is the country with the shortest average height of Male and Guatemala is the country with the shortest average height of Female and the Shortest countries are mostly from Asia and South Asia.