World Happiness Report

```
In [2]: import pandas as pd
        import numpy as np
        import matplotlib.pyplot as plt
        import seaborn as sns

        import warnings
        warnings.filterwarnings('ignore')
```

```
In [3]: df=pd.read_csv("https://raw.githubusercontent.com/dsrscientist/DSData/master/happiness_score_dataset.csv")
```

```
In [4]: df
```

Out[4]:

	Country	Region	Happiness Rank	Happiness Score	Standard Error	Economy (GDP per Capita)	Family	Health (Life Expectancy)	Freedom	Trust (Government Corruption)	Generosity
0	Switzerland	Western Europe	1	7.587	0.03411	1.39651	1.34951	0.94143	0.66557	0.41978	0.29678
1	Iceland	Western Europe	2	7.561	0.04884	1.30232	1.40223	0.94784	0.62877	0.14145	0.43630
2	Denmark	Western Europe	3	7.527	0.03328	1.32548	1.36058	0.87464	0.64938	0.48357	0.34139
3	Norway	Western Europe	4	7.522	0.03880	1.45900	1.33095	0.88521	0.66973	0.36503	0.34699
4	Canada	North America	5	7.427	0.03553	1.32629	1.32261	0.90563	0.63297	0.32957	0.45811
...	...	...	...	...	...	...	...	...	...	...	...
	Sub										

```
In [5]: df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 158 entries, 0 to 157
Data columns (total 12 columns):
 #   Column                         Non-Null Count  Dtype
---  ------                         --------------  -----
 0   Country                        158 non-null    object
 1   Region                         158 non-null    object
 2   Happiness Rank                 158 non-null    int64
 3   Happiness Score                158 non-null    float64
 4   Standard Error                 158 non-null    float64
 5   Economy (GDP per Capita)       158 non-null    float64
 6   Family                         158 non-null    float64
 7   Health (Life Expectancy)       158 non-null    float64
 8   Freedom                        158 non-null    float64
 9   Trust (Government Corruption)  158 non-null    float64
 10  Generosity                     158 non-null    float64
 11  Dystopia Residual              158 non-null    float64
dtypes: float64(9), int64(1), object(2)
memory usage: 14.9+ KB
```

In [6]: `df.describe()`

Out[6]:

	Happiness Rank	Happiness Score	Standard Error	Economy (GDP per Capita)	Family	Health (Life Expectancy)	Freedom	Trust (Government Corruption)	Generosity	Dystopia Residual
count	158.000000	158.000000	158.000000	158.000000	158.000000	158.000000	158.000000	158.000000	158.000000	158.000000
mean	79.493671	5.375734	0.047885	0.846137	0.991046	0.630259	0.428615	0.143422	0.237296	2.098977
std	45.754363	1.145010	0.017146	0.403121	0.272369	0.247078	0.150693	0.120034	0.126685	0.553550
min	1.000000	2.839000	0.018480	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.328580
25%	40.250000	4.526000	0.037268	0.545808	0.856823	0.439185	0.328330	0.061675	0.150553	1.759410
50%	79.500000	5.232500	0.043940	0.910245	1.029510	0.696705	0.435515	0.107220	0.216130	2.095415
75%	118.750000	6.243750	0.052300	1.158448	1.214405	0.811013	0.549092	0.180255	0.309883	2.462415
max	158.000000	7.587000	0.136930	1.690420	1.402230	1.025250	0.669730	0.551910	0.795880	3.602140

In [7]: `df.isnull().sum()`

Out[7]:
```
Country                          0
Region                           0
Happiness Rank                   0
Happiness Score                  0
Standard Error                   0
Economy (GDP per Capita)         0
Family                           0
Health (Life Expectancy)         0
Freedom                          0
Trust (Government Corruption)    0
Generosity                       0
Dystopia Residual                0
dtype: int64
```

In [8]: `df[['Country','Generosity']].sort_values(by='Generosity',ascending =False).head(10)`

Out[8]:

	Country	Generosity
128	Myanmar	0.79588
33	Thailand	0.57630
20	United Kingdom	0.51912
36	Malta	0.51752
73	Indonesia	0.51535
90	Somaliland region	0.50318
78	Bhutan	0.47998
6	Netherlands	0.47610
8	New Zealand	0.47501
155	Syria	0.47179

In [18]: `df[['Country','Trust (Government Corruption)']].sort_values(by ='Trust (Government Corruption)',ascending=Fa`

Out[18]:

	Country	Trust (Government Corruption)
153	Rwanda	0.55191
27	Qatar	0.52208
23	Singapore	0.49210
2	Denmark	0.48357
7	Sweden	0.43844
8	New Zealand	0.42922
0	Switzerland	0.41978
5	Finland	0.41372
90	Somaliland region	0.39928
19	United Arab Emirates	0.38583

In [19]: `df[['Country','Family']].sort_values(by = 'Family', ascending=False).head(10)`

Out[19]:

	Country	Family
1	Iceland	1.40223
17	Ireland	1.36948
2	Denmark	1.36058
0	Switzerland	1.34951
43	Uzbekistan	1.34043
3	Norway	1.33095
4	Canada	1.32261
8	New Zealand	1.31967
5	Finland	1.31826
35	Spain	1.31379

In [20]: `df[['Country','Economy (GDP per Capita)']].sort_values(by='Economy (GDP per Capita)',ascending=False).head(1`

Out[20]:

	Country	Economy (GDP per Capita)
27	Qatar	1.69042
16	Luxembourg	1.56391
38	Kuwait	1.55422
23	Singapore	1.52186
3	Norway	1.45900
19	United Arab Emirates	1.42727
0	Switzerland	1.39651
34	Saudi Arabia	1.39541
14	United States	1.39451
71	Hong Kong	1.38604

In [21]: `df[['Country','Freedom']].sort_values(by='Freedom',ascending=False).head(10)`

Out[21]:

	Country	Freedom
3	Norway	0.66973
0	Switzerland	0.66557
144	Cambodia	0.66246
7	Sweden	0.65980
43	Uzbekistan	0.65821
9	Australia	0.65124
2	Denmark	0.64938
5	Finland	0.64169
19	United Arab Emirates	0.64157
27	Qatar	0.64040

In [9]: `df[['Country','Happiness Rank']].head(10)`

Out[9]:

	Country	Happiness Rank
0	Switzerland	1
1	Iceland	2
2	Denmark	3
3	Norway	4
4	Canada	5
5	Finland	6
6	Netherlands	7
7	Sweden	8
8	New Zealand	9
9	Australia	10

In [9]: `df[['Country','Happiness Rank']].head(10)`

Out[9]:

	Country	Happiness Rank
0	Switzerland	1
1	Iceland	2
2	Denmark	3
3	Norway	4
4	Canada	5
5	Finland	6