VE Data set import labary

In [1]:
```python
import numpy as np
import pandas as pd
```

Import dataset

In [2]:
```python
data=pd.read_csv(r"c:\Users\user\Downloads\2015.csv")
data
```

Out[2]:

	Country	Region	Happiness Rank	Happiness Score	Standard Error	Economy (GDP per Capita)	Family	Health (Life Expectancy)	Fre
0	Switzerland	Western Europe	1	7.587	0.03411	1.39651	1.34951	0.94143	0.6
1	Iceland	Western Europe	2	7.561	0.04884	1.30232	1.40223	0.94784	0.6
2	Denmark	Western Europe	3	7.527	0.03328	1.32548	1.36058	0.87464	0.6
3	Norway	Western Europe	4	7.522	0.03880	1.45900	1.33095	0.88521	0.6
4	Canada	North America	5	7.427	0.03553	1.32629	1.32261	0.90563	0.6
...	...	...	...	...	...	...	...	...	
153	Rwanda	Sub-Saharan Africa	154	3.465	0.03464	0.22208	0.77370	0.42864	0.5
154	Benin	Sub-Saharan Africa	155	3.340	0.03656	0.28665	0.35386	0.31910	0.4
155	Syria	Middle East and Northern Africa	156	3.006	0.05015	0.66320	0.47489	0.72193	0.1
156	Burundi	Sub-Saharan Africa	157	2.905	0.08658	0.01530	0.41587	0.22396	0.1
157	Togo	Sub-Saharan Africa	158	2.839	0.06727	0.20868	0.13995	0.28443	0.3

158 rows × 12 columns

Print head first 20 rows

```
In [3]: data.head(10)
```

Out[3]:

	Country	Region	Happiness Rank	Happiness Score	Standard Error	Economy (GDP per Capita)	Family	Health (Life Expectancy)	Freed
0	Switzerland	Western Europe	1	7.587	0.03411	1.39651	1.34951	0.94143	0.66
1	Iceland	Western Europe	2	7.561	0.04884	1.30232	1.40223	0.94784	0.62
2	Denmark	Western Europe	3	7.527	0.03328	1.32548	1.36058	0.87464	0.64
3	Norway	Western Europe	4	7.522	0.03880	1.45900	1.33095	0.88521	0.66
4	Canada	North America	5	7.427	0.03553	1.32629	1.32261	0.90563	0.63
5	Finland	Western Europe	6	7.406	0.03140	1.29025	1.31826	0.88911	0.64
6	Netherlands	Western Europe	7	7.378	0.02799	1.32944	1.28017	0.89284	0.61
7	Sweden	Western Europe	8	7.364	0.03157	1.33171	1.28907	0.91087	0.65
8	New Zealand	Australia and New Zealand	9	7.286	0.03371	1.25018	1.31967	0.90837	0.63
9	Australia	Australia and New Zealand	10	7.284	0.04083	1.33358	1.30923	0.93156	0.65

Print tail last 7 rows

```
In [4]: data.tail(7)
```

Out[4]:

	Country	Region	Happiness Rank	Happiness Score	Standard Error	Economy (GDP per Capita)	Family	Health (Life Expectancy)	Fre
151	Burkina Faso	Sub-Saharan Africa	152	3.587	0.04324	0.25812	0.85188	0.27125	0.
152	Afghanistan	Southern Asia	153	3.575	0.03084	0.31982	0.30285	0.30335	0.
153	Rwanda	Sub-Saharan Africa	154	3.465	0.03464	0.22208	0.77370	0.42864	0.
154	Benin	Sub-Saharan Africa	155	3.340	0.03656	0.28665	0.35386	0.31910	0.
155	Syria	Middle East and Northern Africa	156	3.006	0.05015	0.66320	0.47489	0.72193	0.
156	Burundi	Sub-Saharan Africa	157	2.905	0.08658	0.01530	0.41587	0.22396	0.
157	Togo	Sub-Saharan Africa	158	2.839	0.06727	0.20868	0.13995	0.28443	0.

To print statistical data

```
In [5]: data.describe()
```

Out[5]:

	Happiness Rank	Happiness Score	Standard Error	Economy (GDP per Capita)	Family	Health (Life Expectancy)	Freedom	(Go C
count	158.000000	158.000000	158.000000	158.000000	158.000000	158.000000	158.000000	1
mean	79.493671	5.375734	0.047885	0.846137	0.991046	0.630259	0.428615	
std	45.754363	1.145010	0.017146	0.403121	0.272369	0.247078	0.150693	
min	1.000000	2.839000	0.018480	0.000000	0.000000	0.000000	0.000000	
25%	40.250000	4.526000	0.037268	0.545808	0.856823	0.439185	0.328330	
50%	79.500000	5.232500	0.043940	0.910245	1.029510	0.696705	0.435515	
75%	118.750000	6.243750	0.052300	1.158448	1.214405	0.811013	0.549092	
max	158.000000	7.587000	0.136930	1.690420	1.402230	1.025250	0.669730	

To print rows and coloum

```
In [6]: np.shape(data)
```

Out[6]: (158, 12)

To print no. of elements

```
In [7]: np.size(data)
```

Out[7]: 1896

To print missing values

```
In [8]: data.isna()
```

Out[8]:

	Country	Region	Happiness Rank	Happiness Score	Standard Error	Economy (GDP per Capita)	Family	Health (Life Expectancy)	Freedom
0	False	False	False	False	False	False	False	False	False
1	False	False	False	False	False	False	False	False	False
2	False	False	False	False	False	False	False	False	False
3	False	False	False	False	False	False	False	False	False
4	False	False	False	False	False	False	False	False	False
...	...	...	...	...	...	...	...	...	..
153	False	False	False	False	False	False	False	False	False
154	False	False	False	False	False	False	False	False	False
155	False	False	False	False	False	False	False	False	False
156	False	False	False	False	False	False	False	False	False
157	False	False	False	False	False	False	False	False	False

158 rows × 12 columns

To drop the value in missing place

```
In [9]: data.dropna()
```

Out[9]:

	Country	Region	Happiness Rank	Happiness Score	Standard Error	Economy (GDP per Capita)	Family	Health (Life Expectancy)	Fre
0	Switzerland	Western Europe	1	7.587	0.03411	1.39651	1.34951	0.94143	0.6
1	Iceland	Western Europe	2	7.561	0.04884	1.30232	1.40223	0.94784	0.6
2	Denmark	Western Europe	3	7.527	0.03328	1.32548	1.36058	0.87464	0.6
3	Norway	Western Europe	4	7.522	0.03880	1.45900	1.33095	0.88521	0.6
4	Canada	North America	5	7.427	0.03553	1.32629	1.32261	0.90563	0.6
...	...	...	...	...	...	...	...	...	
153	Rwanda	Sub-Saharan Africa	154	3.465	0.03464	0.22208	0.77370	0.42864	0.5
154	Benin	Sub-Saharan Africa	155	3.340	0.03656	0.28665	0.35386	0.31910	0.4
155	Syria	Middle East and Northern Africa	156	3.006	0.05015	0.66320	0.47489	0.72193	0.1
156	Burundi	Sub-Saharan Africa	157	2.905	0.08658	0.01530	0.41587	0.22396	0.1
157	Togo	Sub-Saharan Africa	158	2.839	0.06727	0.20868	0.13995	0.28443	0.3

158 rows × 12 columns

```
In [10]: dd=data[['Happiness Rank','Happiness Score']]
         dd
```

Out[10]:

	Happiness Rank	Happiness Score
0	1	7.587
1	2	7.561
2	3	7.527
3	4	7.522
4	5	7.427
...	...	...
153	154	3.465
154	155	3.340
155	156	3.006
156	157	2.905
157	158	2.839

158 rows × 2 columns

```
In [11]: dd.plot.bar(color='r')
```

Out[11]: <AxesSubplot:>
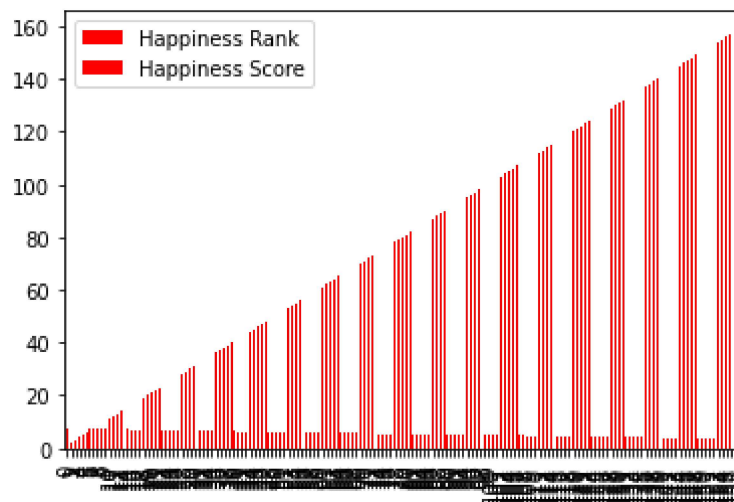
```
In [13]: dd.plot.scatter(x='Happiness Rank',y='Happiness Score')
```

Out[13]: <AxesSubplot:xlabel='Happiness Rank', ylabel='Happiness Score'>
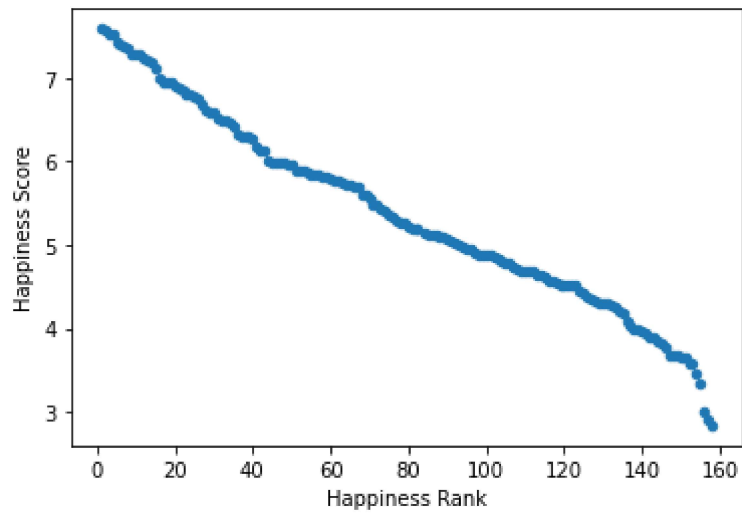

```
In [14]: dd.plot.pie(y='Happiness Rank')
```
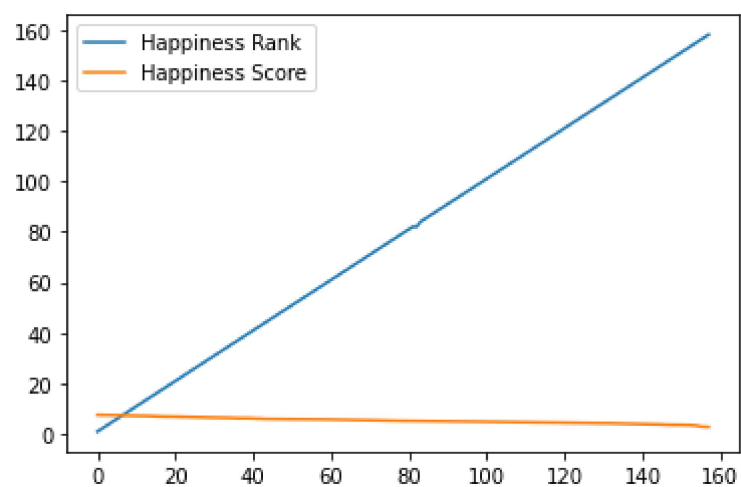
Out[14]: <AxesSubplot:ylabel='Happiness Rank'>
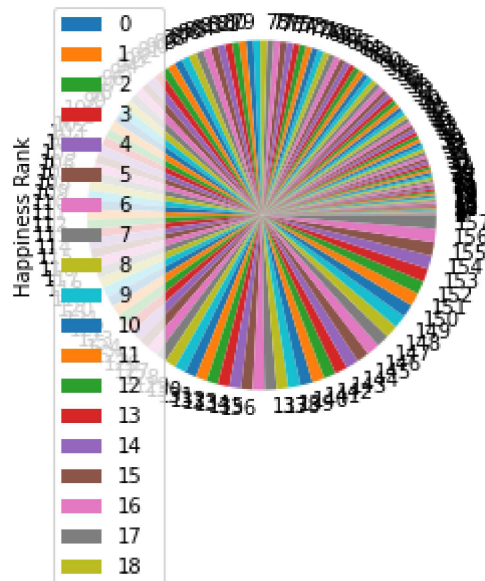
In [15]: `dd.plot.box()`

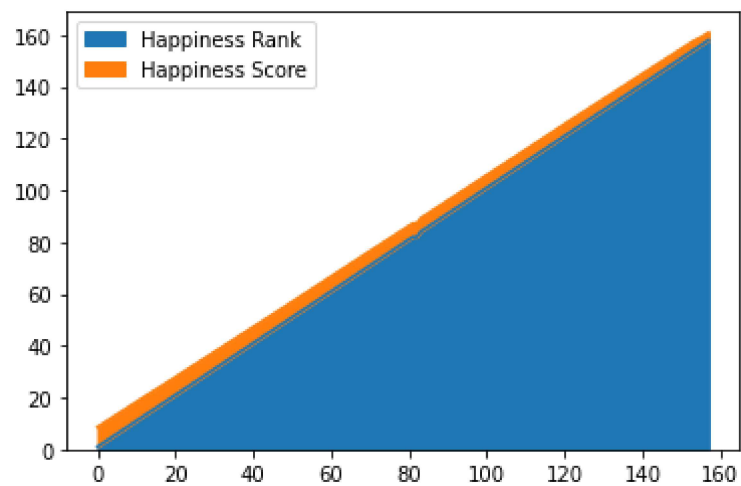Out[15]: `<AxesSubplot:>`
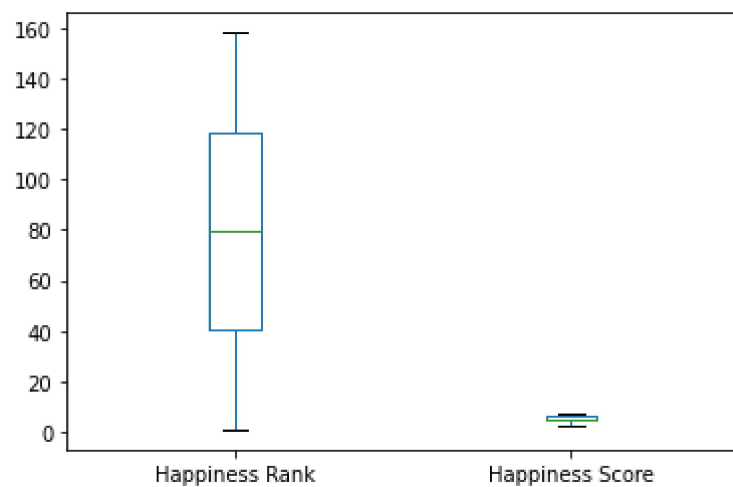
In [16]: `dd.plot.hist()`

Out[16]: `<AxesSubplot:ylabel='Frequency'>`

`dd.plot.line()`

`<AxesSubplot:>`

`dd.plot.area()`
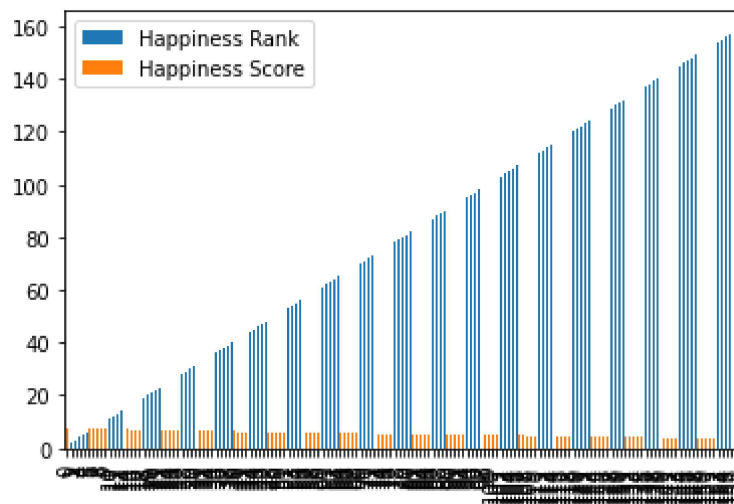
`<AxesSubplot:>`

```
In [19]: dd.plot.bar()
```

Out[19]: <AxesSubplot:>


```
In [ ]:
```