```
In [1]:
           import numpy as np
           import pandas as pd
In [2]:
            rawdata=pd.read csv('world-happiness-report.csv')
In [3]:
            rawdata
Out[3]:
                                                            Social
                                                                             life
                                                                                                                 Perceptions of
                                                                                                                                     Positive
                                       Life
                                                Log
                                                                                                                                                   Negative
                                                                                              Generosity
                  Country year
                                    Ladder
                                                GDP
                                                                                     choices
                                                                                                                                       affect
                                                                                                                                                     affect
                                                           support
                                                                                                                     corruption
                                                                      expectancy
            0 Afghanistan 2008
                                      3.724
                                               7.370
                                                             0.451
                                                                            50.80
                                                                                       0.718
                                                                                                   0.168
                                                                                                                          0.882
                                                                                                                                        0.518
                                                                                                                                                      0.258
            1 Afghanistan 2009
                                      4.402
                                               7.540
                                                             0.552
                                                                            51.20
                                                                                       0.679
                                                                                                   0.190
                                                                                                                          0.850
                                                                                                                                       0.584
                                                                                                                                                      0.237
            2 Afghanistan 2010
                                      4.758
                                               7.647
                                                             0.539
                                                                           51.60
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            3 Afghanistan 2011
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                                               7.620
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                                                                                                   0.162
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            4 Afghanistan 2012
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                                      3.783
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                Azerbaijan 2007
                                      4.568
                                               9.386
                                                             0.753
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                Azerbaijan 2008
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                                               9.465
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                Azerbaijan 2009
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                                      4.574
                Azerbaijan 2010
                                               9.569
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                                      4.219
                Azerbaijan 2011
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                                      4.680
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                                                                                       0.537
                                                                                                   -0.105
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                                                                                                                                        0.536
         99 rows × 11 columns
In [4]:
           df=rawdata.describe()
In [5]:
           df
```

```
Social
                                                                       life
                                                                                                        Perceptions of
                                                                                                                          Positive
                                                                                                                                      Negative
Out[5]:
                                        Log GDP
                                                                                      Generosity
                       vear
                               Ladder
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                                                      support
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                2013.080808
                              5.562768
                                        9.630919
                                                     0.789816
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                                                                                       -0.022615
                                                                                                             0.737258
                                                                                                                                      0.288163
          mean
                                                                                                                         0.680347
                                                                  6.549259
            std
                   4.059951
                              1.351619
                                        0.977365
                                                     0.145652
                                                                             0.182850
                                                                                        0.177591
                                                                                                             0.177213
                                                                                                                         0.125811
                                                                                                                                      0.087084
           min
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                                        9.259000
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                                                                                        0.369000
                                                                                                             0.954000
                                                                                                                         0.864000
                                                                                                                                      0.502000
In [6]:
          dn=np.array([rawdata])
In [7]:
          dn
Out[7]: array([[['Afghanistan', 2008, 3.724, ..., 0.882, 0.518, 0.258],
                   ['Afghanistan', 2009, 4.402, ..., 0.85, 0.584, 0.237],
                   ['Afghanistan', 2010, 4.758, ..., 0.707, 0.618, 0.275],
                   ['Azerbaijan', 2009, 4.574, ..., 0.754, 0.544, 0.234],
                   ['Azerbaijan', 2010, 4.219, ..., 0.858, 0.527, 0.272],
                   ['Azerbaijan', 2011, 4.68, ..., 0.795, 0.536, 0.258]]],
                dtvpe=object)
In [8]:
          dn = np.array(df)
In [9]:
          dn
Out[9]: array([[ 9.90000000e+01,
                                        9.9000000e+01,
                                                           9.90000000e+01,
                    9.80000000e+01,
                                       9.90000000e+01,
                                                           9.70000000e+01,
                    9.60000000e+01,
                                       9.70000000e+01,
                                                           9.80000000e+01.
                    9.80000000e+011,
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[ 2.01308081e+03,
                                    5.56276768e+00,
                                                      9.63091919e+00,
                   7.89816327e-01,
                                    6.57838384e+01,
                                                      6.93876289e-01,
                  -2.26145833e-02,
                                    7.37257732e-01,
                                                      6.80346939e-01,
                   2.88163265e-01],
                 [ 4.05995066e+00,
                                    1.35161944e+00,
                                                      9.77365249e-01.
                   1.45652202e-01.
                                    6.54925930e+00.
                                                      1.82850022e-01.
                   1.77591273e-01.
                                    1.77213282e-01,
                                                      1.25810535e-01,
                   8.70837604e-021.
                 [ 2.00500000e+03.
                                    2.37500000e+00.
                                                      7.3700000e+00,
                                                      3.74000000e-01,
                   4.20000000e-01,
                                    5.08000000e+01,
                  -2.51000000e-01.
                                    3.57000000e-01.
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                 [ 2.01000000e+03,
                                    4.48200000e+00,
                   6.99750000e-01.
                                    6.48100000e+01.
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                  -1.70500000e-01,
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                   2.21250000e-011,
                 [ 2.01300000e+03,
                                                      9.47600000e+00,
                                    5.46400000e+00,
                   8.08500000e-01,
                                    6.69600000e+01,
                                                      7.18000000e-01,
                  -1.01500000e-01,
                                    8.17000000e-01,
                                                      6.72000000e-01,
                   2.72500000e-011,
                 [ 2.01650000e+03,
                                    7.06200000e+00,
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                                                      8.89000000e-01,
                   9.24750000e-01,
                                    7.12400000e+01,
                                                      8.06250000e-01,
                   1.18750000e-01,
                                    8.76000000e-01,
                   3.41250000e-011,
                                                      1.09390000e+01,
                 [ 2.02000000e+03,
                                    7.49900000e+00,
                   9.68000000e-01.
                                    7.42000000e+01.
                                                      9.45000000e-01.
                   3.69000000e-01.
                                    9.54000000e-01.
                                                      8.64000000e-01.
                   5.02000000e-01]])
In [10]:
          dn=np.array([rawdata.max])
In [11]:
          dn
Out[11]: array([<bound method NDFrame._add_numeric_operations.<locals>.max of
                                                                                         Country
                                                                                                        year Life Ladder Log GDP
         Social support \
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                     Afghanistan
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                     Afghanistan
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                     Afghanistan
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                                                              9.386
                      Azerbaijan
                                        2007
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```

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Azerbaijan
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                     life expectancy
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                 [99 rows x 11 columns]>
         ],
                dtype=object)
In [12]:
          dn=np.array([rawdata.min])
In [13]:
          dn
Out[13]: array([<bound method NDFrame. add numeric operations.<locals>.min of
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          life expectancy
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           Positive affect Negative affect
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      [99 rows x 11 columns]>
     dtvpe=object)
dn=np.array([rawdata.mean])
```

],

In [14]:

```
],
                dtype=object)
In [16]:
          dn=np.array([rawdata.median])
In [17]:
          dn
Out[17]: array([<bound method NDFrame. add numeric operations.<locals>.median of
                                                                                              Country
                                                                                                             year Life Ladder Log
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                 [99 rows x 11 columns]>
         ],
                dtype=object)
In [18]:
          dn=np.array([rawdata.var])
In [19]:
          dn
Out[19]: array([<bound method NDFrame. add numeric operations.<locals>.var of
                                                                                          Country
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                                                    Generosity Perceptions of corruption \
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                [99 rows x 11 columns]>
        ],
               dtype=object)
In [ ]:
```