EXPERIMENT 6

OUTPUT

Number of rows and columns:

(176, 11)

First five rows of the dataset:

country ... MostDangerousCountriesForWomen\_WDIAttitudesTowardViolence\_2019

0 India ... 74.0

1 China ... 80.0

2 United States ... 21.0

3 Indonesia ... 51.0

4 Pakistan ... NaN

[5 rows x 11 columns]

Size of the dataset (total number of elements):

1936

Number of missing values in each column:

country 0

MostDangerousCountriesForWomen\_WomenPeaceAndSecurityIndex\_Score\_2023 0

MostDangerousCountriesForWomen\_WomensDangerIndexWDI\_TotalScore\_2019 126

MostDangerousCountriesForWomen\_WDIStreetSafety\_2019 126

MostDangerousCountriesForWomen\_WDIIntentionalHomicide\_2019 126

MostDangerousCountriesForWomen\_WDINonPartnerViolence\_2019 126

MostDangerousCountriesForWomen\_WDIIntimatePartnerViolence\_2019 126

MostDangerousCountriesForWomen\_WDILegalDiscrimination\_2019 126

MostDangerousCountriesForWomen\_WDIGlobalGenderGap\_2019 126

MostDangerousCountriesForWomen\_WDIGenderInequality\_2019 126

MostDangerousCountriesForWomen\_WDIAttitudesTowardViolence\_2019 126

dtype: int64

Sum of numerical columns:

MostDangerousCountriesForWomen\_WomenPeaceAndSecurityIndex\_Score\_2023 119.738

MostDangerousCountriesForWomen\_WomensDangerIndexWDI\_TotalScore\_2019 20650.580

MostDangerousCountriesForWomen\_WDIStreetSafety\_2019 2687.000

MostDangerousCountriesForWomen\_WDIIntentionalHomicide\_2019 778.000

MostDangerousCountriesForWomen\_WDINonPartnerViolence\_2019 1987.000

MostDangerousCountriesForWomen\_WDIIntimatePartnerViolence\_2019 2592.000

MostDangerousCountriesForWomen\_WDILegalDiscrimination\_2019 1822.000

MostDangerousCountriesForWomen\_WDIGlobalGenderGap\_2019 3529.000

MostDangerousCountriesForWomen\_WDIGenderInequality\_2019 2114.000

MostDangerousCountriesForWomen\_WDIAttitudesTowardViolence\_2019 1699.000

dtype: float64

Average of numerical columns:

MostDangerousCountriesForWomen\_WomenPeaceAndSecurityIndex\_Score\_2023 0.68033

MostDangerousCountriesForWomen\_WomensDangerIndexWDI\_TotalScore\_2019 413.01160

MostDangerousCountriesForWomen\_WDIStreetSafety\_2019 53.74000

MostDangerousCountriesForWomen\_WDIIntentionalHomicide\_2019 15.56000

MostDangerousCountriesForWomen\_WDINonPartnerViolence\_2019 39.74000

MostDangerousCountriesForWomen\_WDIIntimatePartnerViolence\_2019 51.84000

MostDangerousCountriesForWomen\_WDILegalDiscrimination\_2019 36.44000

MostDangerousCountriesForWomen\_WDIGlobalGenderGap\_2019 70.58000

MostDangerousCountriesForWomen\_WDIGenderInequality\_2019 42.28000

MostDangerousCountriesForWomen\_WDIAttitudesTowardViolence\_2019 33.98000

dtype: float64

Minimum values of numerical columns:

MostDangerousCountriesForWomen\_WomenPeaceAndSecurityIndex\_Score\_2023 0.286

MostDangerousCountriesForWomen\_WomensDangerIndexWDI\_TotalScore\_2019 212.040

MostDangerousCountriesForWomen\_WDIStreetSafety\_2019 9.000

MostDangerousCountriesForWomen\_WDIIntentionalHomicide\_2019 3.000

MostDangerousCountriesForWomen\_WDINonPartnerViolence\_2019 6.000

MostDangerousCountriesForWomen\_WDIIntimatePartnerViolence\_2019 14.000

MostDangerousCountriesForWomen\_WDILegalDiscrimination\_2019 15.000

MostDangerousCountriesForWomen\_WDIGlobalGenderGap\_2019 41.000

MostDangerousCountriesForWomen\_WDIGenderInequality\_2019 7.000

MostDangerousCountriesForWomen\_WDIAttitudesTowardViolence\_2019 7.000

dtype: float64

Maximum values of numerical columns:

MostDangerousCountriesForWomen\_WomenPeaceAndSecurityIndex\_Score\_2023 0.932

MostDangerousCountriesForWomen\_WomensDangerIndexWDI\_TotalScore\_2019 771.820

MostDangerousCountriesForWomen\_WDIStreetSafety\_2019 100.000

MostDangerousCountriesForWomen\_WDIIntentionalHomicide\_2019 100.000

MostDangerousCountriesForWomen\_WDINonPartnerViolence\_2019 100.000

MostDangerousCountriesForWomen\_WDIIntimatePartnerViolence\_2019 100.000

MostDangerousCountriesForWomen\_WDILegalDiscrimination\_2019 100.000

MostDangerousCountriesForWomen\_WDIGlobalGenderGap\_2019 100.000

MostDangerousCountriesForWomen\_WDIGenderInequality\_2019 100.000

MostDangerousCountriesForWomen\_WDIAttitudesTowardViolence\_2019 100.000

dtype: float64

Dataset after dropping missing values:

Warning (from warnings module):

File "C:/Users/SAMBHAV SHARMA/OneDrive/Desktop/AIML PROJECTS/sample\_exp4.py", line 45

df[column].fillna(df[column].mean(), inplace=True)

FutureWarning: A value is trying to be set on a copy of a DataFrame or Series through chained assignment using an inplace method.

The behavior will change in pandas 3.0. This inplace method will never work because the intermediate object on which we are setting values always behaves as a copy.

For example, when doing 'df[col].method(value, inplace=True)', try using 'df.method({col: value}, inplace=True)' or df[col] = df[col].method(value) instead, to perform the operation inplace on the original object.

Warning (from warnings module):

File "C:/Users/SAMBHAV SHARMA/OneDrive/Desktop/AIML PROJECTS/sample\_exp4.py", line 49

df[column].fillna(df[column].mode()[0], inplace=True)

FutureWarning: A value is trying to be set on a copy of a DataFrame or Series through chained assignment using an inplace method.

The behavior will change in pandas 3.0. This inplace method will never work because the intermediate object on which we are setting values always behaves as a copy.

For example, when doing 'df[col].method(value, inplace=True)', try using 'df.method({col: value}, inplace=True)' or df[col] = df[col].method(value) instead, to perform the operation inplace on the original object.

Dataset after imputing missing values:

country ... MostDangerousCountriesForWomen\_WDIAttitudesTowardViolence\_2019

0 India ... 74.00

1 China ... 80.00

2 United States ... 21.00

3 Indonesia ... 51.00

4 Pakistan ... 33.98

.. ... ... ...

171 Barbados ... 33.98

172 Sao Tome and Principe ... 33.98

173 Samoa ... 33.98

174 Seychelles ... 33.98

175 Tonga ... 33.98

[176 rows x 11 columns]

Dataset after removing outliers:

country ... MostDangerousCountriesForWomen\_WDIAttitudesTowardViolence\_2019

4 Pakistan ... 33.98

5 Nigeria ... 33.98

7 Bangladesh ... 33.98

9 Ethiopia ... 33.98

14 DR Congo ... 33.98

.. ... ... ...

171 Barbados ... 33.98

172 Sao Tome and Principe ... 33.98

173 Samoa ... 33.98

174 Seychelles ... 33.98

175 Tonga ... 33.98

[126 rows x 11 columns]

Dataset after capping outliers:

country ... MostDangerousCountriesForWomen\_WDIAttitudesTowardViolence\_2019

4 Pakistan ... 33.98

5 Nigeria ... 33.98

7 Bangladesh ... 33.98

9 Ethiopia ... 33.98

14 DR Congo ... 33.98

.. ... ... ...

171 Barbados ... 33.98

172 Sao Tome and Principe ... 33.98

173 Samoa ... 33.98

174 Seychelles ... 33.98

175 Tonga ... 33.98

[126 rows x 11 columns]

Final preprocessed dataset:

country ... MostDangerousCountriesForWomen\_WDIAttitudesTowardViolence\_2019

4 Pakistan ... 33.98

5 Nigeria ... 33.98

7 Bangladesh ... 33.98

9 Ethiopia ... 33.98

14 DR Congo ... 33.98

.. ... ... ...

171 Barbados ... 33.98

172 Sao Tome and Principe ... 33.98

173 Samoa ... 33.98

174 Seychelles ... 33.98

175 Tonga ... 33.98

[126 rows x 11 columns]