array(['City', 'Edition', 'Sport', 'Discipline', 'Athlete', 'NOC', Out[3]: 'Gender', 'Event', 'Event_gender', 'Medal'], dtype=object) In [4]: olympic_data.index.hasnans False Out[4]: In [5]: olympic_data.columns.hasnans False Out[5]: olympic_data.index.has_duplicates In [6]: False Out[6]: olympic_data.columns.has_duplicates False Out[7]: In [8]: olympic_data.columns.nbytes Out[8]: olympic_data.index.nbytes In [9] 128 Out[9]: olympic_data.query("(Medal=='Gold')and(Gender=='Men')and(Event=='singles')and(Discipline=='Badminton')").sort_values(by=['Athlete']) Out[10]: City Edition Sport Discipline Athlete NOC Gender Event Event_gender Medal 20045 Barcelona Badminton Badminton BUDI KUSUMA, Alan Gold 1992 INA Men singles 25734 2004 Badminton INA Gold **Athens Badminton** HIDAYAT, Taufik singles M Men Badminton 21787 Atlanta 1996 Badminton HOYER-LARSEN, Poul Erik DEN singles Gold Men 23717 JI, Xinpeng Sydney 2000 Badminton Badminton CHN Men singles Gold 27741 Beijing 2008 Badminton Badminton LIN, Dan CHN Men singles Μ Gold olympic_data.query("Athlete.str.contains('OWENS, Jesse')").Event In [11]: 100m 6427 Out[11] 6439 200m 6456 4x100m relay 6523 long jump Name: Event, dtype: object olympic_data.query("(Medal=='Gold')and(Event=='100m')and(Discipline=='Athletics')and(Gender=='Men')") In [12] City Edition Athlete NOC Gender Event Event_gender Sport Discipline Medal Out[12]: 13 **Athens** 1896 Athletics Athletics BURKE, Thomas USA Men 100m Gold 231 **Paris** 1900 Athletics **Athletics** JARVIS, Francis USA 100m Gold Men 737 St Louis 1904 Athletics Athletics HAHN, Archie USA Men 100m Gold 1191 1908 Athletics **Athletics** WALKER, Reginald RSA 100m London Men Gold 2022 Stockholm CRAIG, Ralph USA 1912 Athletics **Athletics** Men 100m M Gold PADDOCK, Charles USA 2996 Antwerp 1920 Athletics **Athletics** Men 100m M Gold 4236 ABRAHAMS, Harold GBR 100m М Gold Paris 1924 Athletics Athletics Men 5095 Amsterdam 1928 Athletics **Athletics** WILLIAMS, Percy CAN Men 100m M Gold 1932 5806 Los Angeles TOLAN, Eddie USA Gold Athletics Athletics Men 100m Μ OWENS, Jesse USA 6427 Berlin 1936 Athletics **Athletics** Men 100m Μ Gold DILLARD, Harrison USA 7302 London 1948 Athletics **Athletics** Men 100m Μ Gold 8121 Helsinki 1952 Athletics **Athletics** REMIGINO, Lindy USA Men 100m M Gold Melbourne / Stockholm 1956 Athletics MORROW, Robert Joseph USA M Gold 9009 Athletics Men 100m 9924 HARY, Armin EUA Rome 1960 **Athletics Athletics** Men 100m M Gold 10823 HAYES, Robert USA 100m Gold Tokyo 1964 Athletics **Athletics** Men M HINES, James Ray USA 11865 Mexico 1968 Athletics **Athletics** Men 100m M Gold 12902 BORZOV, Valery URS Munich 1972 Athletics **Athletics** Men 100m Μ Gold 14069 Montreal 1976 Athletics **Athletics** CRAWFORD, Hasely TRI Men 100m M Gold 15374 1980 **Athletics** WELLS, Allan GBR 100m Μ Gold Moscow Athletics Men 16794 Los Angeles 1984 Athletics **Athletics** LEWIS, Carl USA 100m Gold Men M 18284 Seoul 1988 Athletics Athletics LEWIS, Carl USA Men 100m Μ Gold 19859 Barcelona 1992 Athletics **Athletics** CHRISTIE, Linford GBR Men 100m Μ Gold 21598 BAILEY, Donovan CAN Gold Atlanta 1996 Athletics Athletics Men 100m M 23521 Sydney 2000 Athletics **Athletics** GREENE, Maurice USA Men 100m Μ Gold 25539 GATLIN, Justin USA **Athens** 2004 Athletics **Athletics** Men 100m M Gold 27552 Beijing 2008 Athletics **Athletics** BOLT, Usain JAM Men 100m M Gold olympic_data.query("(Medal=='Gold')and(Event=='100m')and(Discipline=='Athletics')and(Gender=='Men')") In [13] Athlete NOC Gender Event Event_gender Out[13]: City Edition Sport Discipline Medal 13 1896 **Athletics Athletics** BURKE, Thomas USA Gold **Athens** Men 100m M 231 Paris 1900 Athletics **Athletics** JARVIS, Francis USA Men 100m Gold 737 St Louis 1904 Athletics **Athletics** HAHN, Archie USA 100m Μ Gold Men 1191 London 1908 Athletics **Athletics** WALKER, Reginald RSA 100m Gold Men 2022 Stockholm 1912 Athletics CRAIG, Ralph USA Gold **Athletics** Men 100m M 2996 Antwerp 1920 **Athletics Athletics** PADDOCK, Charles USA 100m Gold Men 4236 ABRAHAMS, Harold GBR Paris 1924 **Athletics Athletics** Men 100m Μ Gold 5095 Amsterdam 1928 **Athletics Athletics** WILLIAMS, Percy CAN 100m Gold Men 5806 Los Angeles 1932 **Athletics Athletics** TOLAN, Eddie USA М Gold Men 100m OWENS, Jesse USA 6427 Berlin 1936 **Athletics Athletics** 100m Gold Men 7302 DILLARD, Harrison Gold London 1948 Athletics **Athletics** USA 100m M Men **Athletics** 8121 Helsinki 1952 Athletics REMIGINO, Lindy USA Men 100m Gold MORROW, Robert Joseph USA 9009 Melbourne / Stockholm 1956 Athletics Gold Athletics Men 100m Μ 9924 Rome 1960 **Athletics Athletics** HARY, Armin EUA 100m Gold Men 1964 100m 10823 **Athletics** HAYES, Robert USA Μ Gold Tokyo Athletics Men 11865 1968 HINES, James Ray USA 100m Gold Mexico Athletics **Athletics** Men 12902 Munich 1972 Athletics **Athletics** BORZOV, Valery URS 100m M Gold Men 14069 CRAWFORD, Hasely Montreal 1976 Athletics **Athletics** TRI Men 100m M Gold 15374 Gold 1980 Athletics **Athletics** WELLS, Allan GBR 100m Μ Moscow Men LEWIS, Carl USA 16794 Gold Los Angeles 1984 Athletics **Athletics** Men 100m M 18284 LEWIS, Carl USA Seoul 1988 Athletics **Athletics** Men 100m M Gold 19859 Barcelona 1992 Athletics **Athletics** CHRISTIE, Linford GBR Men 100m Μ Gold 21598 1996 Athletics Men 100m Gold Atlanta **Athletics** BAILEY, Donovan CAN Μ Sydney 23521 2000 Athletics **Athletics** GREENE, Maurice USA Men 100m Gold GATLIN, Justin 25539 2004 **Athletics** USA 100m Μ Gold Athens Athletics Men BOLT, Usain JAM 27552 2008 Athletics Men 100m Beijing **Athletics** Gold data_1984_2008=olympic_data.set_index(['Edition']).loc[1984:2009] In [14]: data_1984_2008.NOC.value_counts()[:3] USA 1837 Out[14]: AUS 762 **GER** 691 Name: NOC, dtype: int64 olympic_data.query("(Medal=='Gold')and(Gender=='Men')and(Event=='singles')and(Discipline=='Badminton')").sort_values(by=['Athlete']).NOC.value_counts() In [15]: INA Out[15]: CHN 2 DEN 1 Name: NOC, dtype: int64 olympic_data.query("(Medal=='Gold')and(Event=='100m')and(Discipline=='Athletics')and(Gender=='Men')").sort_values(['Edition'],ascending=False) In [16]: Out[16]: City Edition Sport Discipline Athlete NOC Gender Event Event_gender Medal **Athletics** 27552 Beijing 2008 Athletics BOLT, Usain JAM Men 100m Gold Athletics 100m 25539 2004 GATLIN, Justin USA **Athens Athletics** Μ Gold Men Athletics 23521 Sydney 2000 **Athletics** GREENE, Maurice USA Men 100m Gold 21598 Atlanta 1996 Athletics **Athletics** BAILEY, Donovan CAN 100m M Gold Men **Athletics** CHRISTIE, Linford GBR 19859 Barcelona 1992 **Athletics** Men 100m Gold Athletics 18284 1988 LEWIS, Carl USA Seoul **Athletics** 100m M Gold Men **Athletics** 16794 Los Angeles 1984 Athletics LEWIS, Carl USA Men 100m Μ Gold 15374 1980 WELLS, Allan GBR Moscow Athletics **Athletics** Men 100m Gold 14069 Montreal 1976 Athletics **Athletics** CRAWFORD, Hasely TRI Men 100m Gold 12902 1972 Athletics BORZOV, Valery URS 100m Munich **Athletics** M Gold Men 11865 Mexico 1968 Athletics **Athletics** HINES, James Ray USA Men 100m Gold 10823 Athletics **Athletics** HAYES, Robert USA Tokyo 1964 100m M Gold Men 9924 Rome 1960 Athletics **Athletics** HARY, Armin EUA Men 100m Gold 9009 Melbourne / Stockholm 1956 Athletics Athletics MORROW, Robert Joseph USA 100m M Gold Men 8121 Helsinki 1952 **Athletics Athletics** REMIGINO, Lindy USA Men 100m Μ Gold 7302 1948 Athletics DILLARD, Harrison USA London **Athletics** 100m M Gold Men 6427 Berlin 1936 Athletics **Athletics** OWENS, Jesse USA Men 100m Gold 5806 1932 Athletics TOLAN, Eddie USA Los Angeles **Athletics** Men 100m Μ Gold 5095 Amsterdam 1928 Athletics **Athletics** WILLIAMS, Percy CAN Men 100m Gold 4236 1924 Athletics Athletics ABRAHAMS, Harold GBR **Paris** 100m M Gold Men 2996 Antwerp 1920 Athletics **Athletics** PADDOCK, Charles USA Men 100m Gold CRAIG, Ralph USA 2022 Stockholm 1912 Athletics **Athletics** 100m M Gold Men 1191 London 1908 Athletics Athletics WALKER, Reginald RSA Men 100m Gold 737 St Louis 1904 Athletics **Athletics** HAHN, Archie USA 100m Gold Men 231 Paris 1900 Athletics **Athletics** JARVIS, Francis USA Men 100m Μ Gold BURKE, Thomas USA Athens 13 1896 Athletics **Athletics** Men 100m M Gold

import pandas as pd

array([

Out[2]:

In [3]:

olympic_data.index.values

olympic_data.columns.values

1,

olympic_data=pd.read_csv("https://raw.githubusercontent.com/svkarthik86/Advance-Python-Numpy/main/olympics.csv",skiprows=4)

2, ..., 29213, 29214, 29215], dtype=int64)