df = pd.read_csv('nutrition.csv') In [6]: df.head(2) YearStart YearEnd LocationAbbr LocationDesc Datasource Class Topic Question Data_Value_Unit Data_Value_Type ... GeoLocation ClassID TopicID QuestionID DataValueTypeID LocationID StratificationCategory1 Out[6]: Percent of adults Behavioral Physical who Risk Factor Physical US Value ... 59 2020 2020 National Activity -NaN NaN PA PA1 Q047 VALUE Race/Ethnicity engage Surveillance Activity Behavior in no System leisure-Percent Behavioral of adults Obesity Obesity / aged 18 Risk Factor (13.444304, 2014 2014 GU / Weight Weight NaN Value ... **OWS** OWS1 Q036 VALUE 66 Education Surveillance years 144.793731) Status Status and older System 2 rows × 33 columns In [7]: **df** GeoLocation ClassID TopicID QuestionID DataValueTypeID LocationID Stra YearStart YearEnd LocationAbbr LocationDesc Datasource Class Topic Question Data_Value_Unit Data_Value_Type ... Out[7]: Percent of Behavioral Physical adults who Risk Factor Physical 0 2020 2020 US National Activity -NaN Value ... NaN PA PA1 Q047 VALUE 59 engage in Surveillance Activity Behavior no leisure-System tim... Percent of Behavioral adults Obesity / Obesity / Risk Factor aged 18 (13.444304,Value ... OWS OWS1 VALUE 1 2014 2014 GU Guam Weight Weight NaN Q036 66 Surveillance vears and 144.793731) Status Status System older who Percent of Behavioral adults Obesity / Obesity / Risk Factor aged 18 Value ... VALUE 59 2 2013 2013 US National Weight Weight NaN NaN OWS OWS1 Q036 Surveillance vears and Status Status System older who Percent of Behavioral adults Obesity / Obesity / Risk Factor aged 18 VALUE 3 2013 2013 US National Weight Weight NaN Value ... NaN OWS OWS1 Q037 59 Surveillance years and Status Status System older who Percent of Behavioral Physical adults who Risk Factor Physical 2015 2015 US Value ... Q045 **VALUE** 59 National Activity achieve at NaN NaN PA PA1 Surveillance Activity Behavior least 300 System min... Percent of Behavioral adults who Fruits and Risk Factor Fruits and (47.47531977900047, Value ... -100.11842104899966) FV1 Q019 **VALUE** 88624 2021 2021 North Dakota FV 38 NDVegetables NaN report Surveillance Vegetables - Behavior consuming System vegetab... Percent of Behavioral Physical adults who Risk Factor Physical (18.220833, Puerto Rico 88625 2021 2021 NaN Value ... PA1 Q047 VALUE 72 Activity engage in Surveillance Activity -66.590149) Behavior no leisure-System tim... Percent of Behavioral adults who Physical (44.39319117400049, Risk Factor Physical 88626 2021 2021 Value PA1 Q047 VALUE 55 WI Wisconsin Activity - engage in NaN PA -89.81637074199966) Surveillance Activity Behavior no leisure-System Percent of Behavioral Fruits and adults who Risk Factor Fruits and (39.360700171000474, Value ... 88627 2021 2021 UT Utah NaN FV FV1 Q018 **VALUE** 49 Vegetables report Surveillance Vegetables -111.58713063499971) - Behavior consuming System fruit I... Percent of Behavioral Physical adults who Risk Factor Physical 2021 Q047 **VALUE** 88628 2021 US National NaN Value ... NaN PA PA1 59 Activity engage in Surveillance Activity Behavior no leisure-System tim... 88629 rows × 33 columns df.duplicated() In [10]: False Out[10]: False 2 False 3 False False . . . 88624 False 88625 False 88626 False 88627 False 88628 False Length: 88629, dtype: bool df.duplicated(keep = False) False Out[11]: False 2 False 3 False 4 False 88624 False 88625 False 88626 False 88627 False 88628 False Length: 88629, dtype: bool df.describe() In [16]: Out[16]: YearStart YearEnd Data_Value_Unit Data_Value Data_Value_Alt Low_Confidence_Limit High_Confidence_Limit Sample_Size LocationID count 88629.000000 88629.000000 0.0 79851.000000 79851.000000 79851.000000 79851.000000 79851.000000 88629.000000 2016.011362 2016.011362 31.236493 31.236493 26.907732 36.135953 3656.809044 30.906475 mean NaN 3.121080 10.113829 10.113829 9.907896 11.061591 std 3.121080 NaN 18706.392637 17.485456 min 2011.000000 2011.000000 NaN 0.900000 0.900000 0.300000 3.000000 50.000000 1.000000 **25**% 2013.000000 2013.000000 24.300000 24.300000 20.000000 28.600000 516.000000 17.000000 NaN 2016.000000 2016.000000 31.200000 31.200000 26.800000 35.900000 1109.000000 30.000000 NaN 2019.000000 2019.000000 37.000000 37.000000 32.900000 42.200000 2408.000000 45.000000 75% NaN 2021.000000 2021.000000 NaN 77.600000 77.600000 70.200000 87.700000 476876.000000 78.000000 df.isna() In [19]: YearStart YearEnd LocationAbbr LocationDesc Datasource Class Topic Question Data_Value_Unit Data_Value_Type ... GeoLocation ClassID TopicID QuestionID DataValueTypeID LocationID StratificationCategory1 Out[19]: True 0 False False False True False ... False True False ... False False False False False False False 2 False False False False False False False False True False ... True False True False ... True False False False False False False False ... False False False False False False False False True True False False False False False False ••• False False False 88624 False False False False False True False ... False False False False False False False 88625 False False False False False False False False True False ... False False False False False False False False 88626 False False False False False False False True False ... False False False False False False False False False 88627 False False False False False False False True False ... False ... False 88628 False False False False True True False False False False False False 88629 rows × 33 columns df.all() In [20]: YearStart True Out[20]: YearEnd True LocationAbbr True LocationDesc True Datasource True Class True Topic True Question True Data_Value_Unit True Data_Value_Type True Data_Value True Data_Value_Alt True Data_Value_Footnote_Symbol True Data_Value_Footnote True Low_Confidence_Limit True High_Confidence_Limit True Sample_Size True Total True True Age(years) Education True Gender True Income True Race/Ethnicity True GeoLocation True ClassID True TopicID True QuestionID True DataValueTypeID True LocationID True StratificationCategory1 True Stratification1 True StratificationCategoryId1 True StratificationID1 True dtype: bool In [23]: df.notna() YearStart YearEnd LocationAbbr LocationDesc Datasource Class Topic Question Data_Value_Unit Data_Value_Type ... GeoLocation ClassID TopicID QuestionID DataValueTypeID LocationID StratificationCategory1 Out[23]: 0 True True True True True True True False True ... False True True True True True True 1 True False True ... True True True True 2 True True True True True True True False True ... False True True True True True True True 3 False True True True True ... False True 4 True True True True True True True True False True ... False True True True True True True

In []:

88624

88625

88626

88627

88628

True

True

True

True

True

88629 rows × 33 columns

True

True True True

True

True

True

True

True

True

True

True

True

False

False

False

False

False

True ...

True ...

True ...

True ...

True ...

True

True

True

True

False

True

In [1]: **import** pandas **as** pd