

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

```
In [8]: df=pd.read_csv('CAERS_ASCII_2004_2017Q2.csv')
```

```
In [9]: df
```

```
Out[9]:
```

	RA_Report #	RA_CAErs_Created Date	AEC_Event_Start Date	PRI_Product_Role	PRI_Reported_Brand/Product Name	PRI_FDA_Industry Code	PRI_FDA_Industry Name	CI_Age_at_Adverse_Event	CI_Age_Unit	CI_Gender	AEC_One_Row_Outcomes	C
0	65325	1/1/2004	8/4/2003	Suspect	MIDWEST COUNTRY FAIR CHOCOLATE FLAVORED CHIPS	3	Bakery Prod/Dough/Mix/Icing	2.0	Year(s)	Female	VISITED AN ER, VISITED A HEALTH CARE PROVIDER...	S RA
1	65325	1/1/2004	8/4/2003	Suspect	MIDWEST COUNTRY FAIR CHOCOLATE FLAVORED CHIPS	3	Bakery Prod/Dough/Mix/Icing	2.0	Year(s)	Female	VISITED AN ER, VISITED A HEALTH CARE PROVIDER...	S WHE RA
2	65333	1/1/2004	NaN	Suspect	KROGER CLASSIC CREAM-DE-MINT CANDY MINT CHIP I...	13	Ice Cream Prod	NaN	Not Available	Female	VISITED AN ER	
3	65335	1/1/2004	11/24/2003	Suspect	ENFAMIL LIPIL BABY FORMULA	40	Baby Food Prod	3.0	Month(s)	Not Available	NON-SERIOUS INJURIES/ILLNESS	GAS
4	65336	1/1/2004	NaN	Suspect	ENFAMIL LIPIL BABY FORMULA	40	Baby Food Prod	NaN	Not Available	Not Available	VISITED A HEALTH CARE PROVIDER	GAS
...
90781	214516	6/29/2017	1/20/2017	Concomitant	CALTRATE CALCIUM	54	Vit/Min/Prot/Unconv Diet(Human/Animal)	66.0	Year(s)	Female	HOSPITALIZATION, VISITED AN ER	
90782	214516	6/29/2017	1/20/2017	Concomitant	VITAMIN D3	54	Vit/Min/Prot/Unconv Diet(Human/Animal)	66.0	Year(s)	Female	HOSPITALIZATION, VISITED AN ER	
90783	214516	6/29/2017	1/20/2017	Suspect	SUPERIOR PREFERENCE HAIR COLORING	53	Cosmetics	66.0	Year(s)	Female	HOSPITALIZATION, VISITED AN ER	
90784	214604	6/30/2017	NaN	Suspect	DR. PERICONE NECK & CHEST CREAM	53	Cosmetics	NaN	Not Available	Female	NON-SERIOUS INJURIES/ILLNESS	UF
90785	214610	6/30/2017	NaN	Suspect	DR. PERICONE NECK & CHEST CREAM	53	Cosmetics	NaN	Not Available	Not Available	NON-SERIOUS INJURIES/ILLNESS	UF

90786 rows × 12 columns

```
In [10]: df.shape
```

```
Out[10]: (90786, 12)
```

```
In [11]: df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 90786 entries, 0 to 90785
Data columns (total 12 columns):
 #   Column           Non-Null Count  Dtype  
--- 
 0   RA_Report #      90786 non-null   int64  
 1   RA_CAErs_Created Date 90786 non-null   object 
 2   AEC_Event_Start Date 90786 non-null   object 
 3   PRI_Product_Role    90786 non-null   object 
 4   PRI_Reported_Brand/Product Name 90786 non-null   object 
 5   PRI_FDA_Industry Code 90786 non-null   int64  
 6   PRI_FDA_Industry Name 90786 non-null   object 
 7   CI_Age_at_Adverse_Event 52926 non-null   float64
 8   CI_Age_Unit        90786 non-null   object 
 9   CI_Gender          90786 non-null   object 
 10  AEC_One_Row_Outcomes 90786 non-null   object 
 11  SYM_One_Row_Coded_Symptoms 90781 non-null   object 
dtypes: float64(1), int64(2), object(9)
memory usage: 8.3+ MB
```

```
In [12]: pd.set_option('display.max_columns',85)
pd.set_option('display.max_rows', 85)
```

```
In [13]: df
```

```
Out[13]:
```

	RA_Report #	RA_CAErs_Created Date	AEC_Event_Start Date	PRI_Product_Role	PRI_Reported_Brand/Product Name	PRI_FDA_Industry Code	PRI_FDA_Industry Name	CI_Age_at_Adverse_Event	CI_Age_Unit	CI_Gender	AEC_One_Row_Outcomes	C
0	65325	1/1/2004	8/4/2003	Suspect	MIDWEST COUNTRY FAIR CHOCOLATE FLAVORED CHIPS	3	Bakery Prod/Dough/Mix/Icing	2.0	Year(s)	Female	VISITED AN ER, VISITED A HEALTH CARE PROVIDER...	S RA
1	65325	1/1/2004	8/4/2003	Suspect	MIDWEST COUNTRY FAIR CHOCOLATE FLAVORED CHIPS	3	Bakery Prod/Dough/Mix/Icing	2.0	Year(s)	Female	VISITED AN ER, VISITED A HEALTH CARE PROVIDER...	S WHE RA
2	65333	1/1/2004	NaN	Suspect	KROGER CLASSIC CREAM-DE-MINT CANDY MINT CHIP I...	13	Ice Cream Prod	NaN	Not Available	Female	VISITED AN ER	
3	65335	1/1/2004	11/24/2003	Suspect	ENFAMIL LIPIL BABY FORMULA	40	Baby Food Prod	3.0	Month(s)	Not Available	NON-SERIOUS INJURIES/ILLNESS	GAS
4	65336	1/1/2004	NaN	Suspect	ENFAMIL LIPIL BABY FORMULA	40	Baby Food Prod	NaN	Not Available	Not Available	VISITED A HEALTH CARE PROVIDER	GAS
...
90781	214516	6/29/2017	1/20/2017	Concomitant	CALTRATE CALCIUM	54	Vit/Min/Prot/Unconv Diet(Human/Animal)	66.0	Year(s)	Female	HOSPITALIZATION, VISITED AN ER	
90782	214516	6/29/2017	1/20/2017	Concomitant	VITAMIN D3	54	Vit/Min/Prot/Unconv Diet(Human/Animal)	66.0	Year(s)	Female	HOSPITALIZATION, VISITED AN ER	
					SUPERIOR							

90783	214516	6/29/2017	1/20/2017	Suspect	PREFERENCE HAIR COLORING	53	Cosmetics	66.0	Year(s)	Female	HOSPITALIZATION, VISITED AN ER
90784	214604	6/30/2017	NaN	Suspect	DR. PERICONI NECK & CHEST CREAM	53	Cosmetics	NaN	Not Available	Female	NON-SERIOUS INJURIES/ ILLNESS
90785	214610	6/30/2017	NaN	Suspect	DR. PERICONI NECK & CHEST CREAM	53	Cosmetics	NaN	Not Available	Not Available	NON-SERIOUS INJURIES/ ILLNESS

90786 rows × 12 columns

In [14]: df.head()

Out[14]:

RA_Report #	RA_CAErs Created Date	AEC_Event Start Date	PRI_Product Role	PRI_Reported Brand/Product Name	PRI_FDA Industry Code	PRI_FDA Industry Name	Cl_Age at Adverse Event	Cl_Age Unit	Cl_Gender	AEC_One Row Outcomes	SYM_Coded Sym
0	65325	1/1/2004	8/4/2003	Suspect	MIDWEST COUNTRY FAIR CHOCOLATE FLAVORED CHIPS	3	Bakery Prod/Dough/Mix/Icing	2.0	Year(s)	Female	VISITED AN ER, VISITED A HEALTH CARE PROVIDER,...
1	65325	1/1/2004	8/4/2003	Suspect	MIDWEST COUNTRY FAIR CHOCOLATE FLAVORED CHIPS	3	Bakery Prod/Dough/Mix/Icing	2.0	Year(s)	Female	VISITED AN ER, VISITED A HEALTH CARE PROVIDER,...
2	65333	1/1/2004	NaN	Suspect	KROGER CLASSIC CREAM-DE-MINT CANDY MINT CHIP I...	13	Ice Cream Prod	NaN	Not Available	Female	VISITED AN ER
3	65335	1/1/2004	11/24/2003	Suspect	ENFAMIL LIPIL BABY FORMULA	40	Baby Food Prod	3.0	Month(s)	Not Available	NON-SERIOUS INJURIES/ ILLNESS
4	65336	1/1/2004	NaN	Suspect	ENFAMIL LIPIL BABY FORMULA	40	Baby Food Prod	NaN	Not Available	Not Available	VISITED A HEALTH CARE PROVIDER

In [15]: df.head(10)

Out[15]:

RA_Report #	RA_CAErs Created Date	AEC_Event Start Date	PRI_Product Role	PRI_Reported Brand/Product Name	PRI_FDA Industry Code	PRI_FDA Industry Name	Cl_Age at Adverse Event	Cl_Age Unit	Cl_Gender	AEC_One Row Outcomes	SYM_Coded Sym
0	65325	1/1/2004	8/4/2003	Suspect	MIDWEST COUNTRY FAIR CHOCOLATE FLAVORED CHIPS	3	Bakery Prod/Dough/Mix/Icing	2.0	Year(s)	Female	VISITED AN ER, VISITED A HEALTH CARE PROVIDER,...
1	65325	1/1/2004	8/4/2003	Suspect	MIDWEST COUNTRY FAIR CHOCOLATE FLAVORED CHIPS	3	Bakery Prod/Dough/Mix/Icing	2.0	Year(s)	Female	VISITED AN ER, VISITED A HEALTH CARE PROVIDER,...
2	65333	1/1/2004	NaN	Suspect	KROGER CLASSIC CREAM-DE-MINT CANDY MINT CHIP I...	13	Ice Cream Prod	NaN	Not Available	Female	VISITED AN ER
3	65335	1/1/2004	11/24/2003	Suspect	ENFAMIL LIPIL BABY FORMULA	40	Baby Food Prod	3.0	Month(s)	Not Available	NON-SERIOUS INJURIES/ ILLNESS
4	65336	1/1/2004	NaN	Suspect	ENFAMIL LIPIL BABY FORMULA	40	Baby Food Prod	NaN	Not Available	Not Available	VISITED A HEALTH CARE PROVIDER
5	65345	1/1/2004	12/21/2003	Suspect	FRITO LAY FUNYUNS ONION FLAVOR, ONION RINGS	7	Snack Food Item	10.0	Year(s)	Male	NON-SERIOUS INJURIES/ ILLNESS
6	65350	1/1/2004	NaN	Suspect	GRAPE	20	Fruit/Fruit Prod	NaN	Not Available	Not Available	DEATH
7	65353	1/2/2004	12/1/2003	Suspect	HERBALIFE RELAX NOW	54	Vit/Min/Prot/Unconv Diet(Human/Animal)	NaN	Not Available	Female	VISITED A HEALTH CARE PROVIDER
8	65353	1/2/2004	12/1/2003	Suspect	HERBALIFE TOTAL CONTROL	54	Vit/Min/Prot/Unconv Diet(Human/Animal)	NaN	Not Available	Female	VISITED A HEALTH CARE PROVIDER
9	65354	1/2/2004	NaN	Suspect	YOHIMBE	54	Vit/Min/Prot/Unconv Diet(Human/Animal)	66.0	Year(s)	Male	REQ. INTERVENTION TO PRVNT PERM. IMPRMT.

In [16]: df.tail(10)

Out[16]:

RA_Report #	RA_CAErs Created Date	AEC_Event Start Date	PRI_Product Role	PRI_Reported Brand/Product Name	PRI_FDA Industry Code	PRI_FDA Industry Name	Cl_Age at Adverse Event	Cl_Age Unit	Cl_Gender	AEC_One Row Outcomes	
90776	214407	6/28/2017	3/10/2017	Concomitant	ENSURE	41	Dietary Conv Food/Meal Replacements	92.0	Year(s)	Female	OTHER SERIOUS (IMPORTANT MEDICAL EVENTS), HOSP...
90777	214407	6/28/2017	3/10/2017	Concomitant	VITAMIN D3 (COLECALCIFEROL) (400 IU (INTERNATIO...	54	Vit/Min/Prot/Unconv Diet(Human/Animal)	92.0	Year(s)	Female	OTHER SERIOUS (IMPORTANT MEDICAL EVENTS), HOSP...
90778	214407	6/28/2017	3/10/2017	Suspect	OCCUVITE EYE + MULTI (OCCUVITE MULTIVITAMIN) (TA...	54	Vit/Min/Prot/Unconv Diet(Human/Animal)	92.0	Year(s)	Female	OTHER SERIOUS (IMPORTANT MEDICAL EVENTS), HOSP...
90779	214478	6/29/2017	6/20/2017	Suspect	HONEST PERFECTLY GENTLE SWEET ORANGE VANILLA S...	53	Cosmetics	5.0	Year(s)	Female	OTHER SERIOUS (IMPORTANT MEDICAL EVENTS)
90780	214479	6/29/2017	6/20/2017	Suspect	HONEST PERFECTLY GENTLE SWEET ORANGE VANILLA S...	53	Cosmetics	2.0	Year(s)	Female	OTHER SERIOUS (IMPORTANT MEDICAL EVENTS)
90781	214516	6/29/2017	1/20/2017	Concomitant	CALTRATE CALCIUM	54	Vit/Min/Prot/Unconv Diet(Human/Animal)	66.0	Year(s)	Female	HOSPITALIZATION, VISITED AN ER
90782	214516	6/29/2017	1/20/2017	Concomitant	VITAMIN D3	54	Vit/Min/Prot/Unconv Diet(Human/Animal)	66.0	Year(s)	Female	HOSPITALIZATION, VISITED AN ER
90783	214516	6/29/2017	1/20/2017	Suspect	SUPERIOR HAIR COLORING	53	Cosmetics	66.0	Year(s)	Female	HOSPITALIZATION, VISITED AN ER

	90784	214604	6/30/2017	NaN	Suspect	DR. PERICONE NECK & CHEST CREAM	53	Cosmetics	NaN	Not Available	Female	NON-SERIOUS INJURIES/ ILLNESS
	90785	214610	6/30/2017	NaN	Suspect	DR. PERICONE NECK & CHEST CREAM	53	Cosmetics	NaN	Not Available	Not Available	NON-SERIOUS INJURIES/ ILLNESS
In [17]: df['CI_Gender']												
Out[17]:	0	Female										
	1	Female										
	2	Female										
	3	Not Available										
	4	Not Available										
		...										
	90781	214516	6/29/2017	1/20/2017	Suspect	PERICONE NECK & CHEST CREAM	53	Cosmetics	NaN	Not Available	Female	NON-SERIOUS INJURIES/ ILLNESS
	90782	214516	6/29/2017	1/20/2017	Concomitant	VITAMIN D3	54	Vit/Min/Prot/Unconv Diet(Human/Animal)	66.0	Year(s)	Female	HOSPITALIZATION, VISITED AN ER
	90783	214516	6/29/2017	1/20/2017	Concomitant	CALTRATE CALCIUM	54	Vit/Min/Prot/Unconv Diet(Human/Animal)	66.0	Year(s)	Female	HOSPITALIZATION, VISITED AN ER
		...										
	4	65336	1/1/2004	NaN	Suspect	ENFAMIL LIPIL BABY FORMULA	40	Baby Food Prod	NaN	Not Available	Not Available	VISITED A HEALTH CARE PROVIDER
	3	65335	1/1/2004	11/24/2003	Suspect	ENFAMIL LIPIL BABY FORMULA	40	Baby Food Prod	3.0	Month(s)	Not Available	NON-SERIOUS INJURIES/ ILLNESS
	2	65333	1/1/2004	NaN	Suspect	KROGER CLASSIC CREAM-DE- MINT CANDY MINT CHIP I...	13	Ice Cream Prod	NaN	Not Available	Female	VISITED AN ER
	1	65325	1/1/2004	8/4/2003	Suspect	MIDWEST COUNTRY FAIR CHOCOLATE FLAVORED CHIPS	3	Bakery Prod/Dough/Mix/Icing	2.0	Year(s)	Female	VISITED AN ER, VISITED A HEALTH CARE PROVIDER...
	0	65325	1/1/2004	8/4/2003	Suspect	MIDWEST COUNTRY FAIR CHOCOLATE FLAVORED CHIPS	3	Bakery Prod/Dough/Mix/Icing	2.0	Year(s)	Female	VISITED AN ER, VISITED A HEALTH CARE PROVIDER...
90786 rows × 12 columns												
In [26]:	df.sort_index(inplace=True)											
In [27]:	df											
Out[27]:		RA_Report #	RA_CAERS_Created Date	AEC_Event_Start Date	PRI_Product_Role	PRL_Reported_Brand/Product_Name	PRI_FDA_Industry_Code	PRI_FDA_Industry_Name	Cl_Age_at_Adverse_Event	Cl_Age_Unit	Cl_Gender	AEC_One_Row_Outcomes
	0	65325	1/1/2004	8/4/2003	Suspect	MIDWEST COUNTRY FAIR CHOCOLATE FLAVORED CHIPS	3	Bakery Prod/Dough/Mix/Icing	2.0	Year(s)	Female	VISITED AN ER, VISITED A HEALTH CARE PROVIDER...
	1	65325	1/1/2004	8/4/2003	Suspect	MIDWEST COUNTRY FAIR CHOCOLATE FLAVORED CHIPS	3	Bakery Prod/Dough/Mix/Icing	2.0	Year(s)	Female	VISITED AN ER, VISITED A HEALTH CARE PROVIDER...
	2	65333	1/1/2004	NaN	Suspect	KROGER CLASSIC CREAM-DE- MINT CANDY MINT CHIP I...	13	Ice Cream Prod	NaN	Not Available	Female	VISITED AN ER
	3	65335	1/1/2004	11/24/2003	Suspect	ENFAMIL LIPIL BABY FORMULA	40	Baby Food Prod	3.0	Month(s)	Not Available	NON-SERIOUS INJURIES/ ILLNESS
	4	65336	1/1/2004	NaN	Suspect	ENFAMIL LIPIL BABY FORMULA	40	Baby Food Prod	NaN	Not Available	Not Available	VISITED A HEALTH CARE PROVIDER
		...										
	90781	214516	6/29/2017	1/20/2017	Concomitant	CALTRATE CALCIUM	54	Vit/Min/Prot/Unconv Diet(Human/Animal)	66.0	Year(s)	Female	HOSPITALIZATION, VISITED AN ER
	90782	214516	6/29/2017	1/20/2017	Concomitant	VITAMIN D3	54	Vit/Min/Prot/Unconv Diet(Human/Animal)	66.0	Year(s)	Female	HOSPITALIZATION, VISITED AN ER
	90783	214516	6/29/2017	1/20/2017	Suspect	SUPERIOR PREFERENCE HAIR COLORING	53	Cosmetics	66.0	Year(s)	Female	HOSPITALIZATION, VISITED AN ER
	90784	214604	6/30/2017	NaN	Suspect	DR. PERICONE NECK & CHEST CREAM	53	Cosmetics	NaN	Not Available	Female	NON-SERIOUS INJURIES/...

						CHEST CREAM			Available		ILLNESS	Uf
90785	214610	6/30/2017	NaN	Suspect	DR. PERICONE NECK & CHEST CREAM	53	Cosmetics	NaN	Not Available	Not Available	NON-SERIOUS INJURIES/ILLNESS	UF

90786 rows × 12 columns

In [32]: `df.sort_values('CI_Age Unit')`

Out[32]:

RA_Report #	RA_CAERS_Created Date	AEC_Event_Start Date	PRI_Product_Role	PRI_Reported_Brand/Product Name	PRI_FDA_Industry_Code	PRI_FDA_Industry_Name	CI_Age_at_Adverse_Event	CI_Age_Unit	CI_Gender	AEC_One_Row_Outcomes	SYM_One_Row_Coded_Symptoms
41227	161870	2/6/2013	1/19/2013	Suspect	ENFAMIL HUMAN MILK FORTIFIER LIQUID MEAD JOHNSON	40	Baby Food Prod	24.0	Day(s)	Not Available	HOSPITALIZATION, REQUESTED INTERVENTION TO PRVNT PE...
17664	113441	5/22/2009	NaN	Suspect	SPRINGTIME DRINKING WATER	29	Soft Drink/Water	14.0	Day(s)	Female	VISITED A HEALTH CARE PROVIDER, HOSPITALIZATION
87979	207783	2/18/2017	1/20/2017	Suspect	SWEET EASE NATURAL PRESERVATIVE-FREE SUCROSE S...	40	Baby Food Prod	14.0	Day(s)	Female	HOSPITALIZATION
29700	141064	7/7/2011	3/25/2011	Suspect	SIMILAC LIQUID AND POWDERED INFANT FORMULAS	40	Baby Food Prod	17.0	Day(s)	Not Available	HOSPITALIZATION
29699	141064	7/7/2011	3/25/2011	Suspect	ENFAMIL LIQUID AND POWDERED INFANT FORMULAS	40	Baby Food Prod	17.0	Day(s)	Not Available	HOSPITALIZATION
...
42871	164605	4/17/2013	4/2/2013	Suspect	COUNTRY LIFE MAXI-HAIR PLUS	54	Vit/Min/Prot/Unconv Diet(Human/Animal)	29.0	Year(s)	Female	VISITED A HEALTH CARE PROVIDER, OTHER SERIOUS...
42872	164606	4/17/2013	NaN	Concomitant	BILBERRY 1000 MG	54	Vit/Min/Prot/Unconv Diet(Human/Animal)	83.0	Year(s)	Male	OTHER SERIOUS (IMPORTANT MEDICAL EVENTS), VISIT...
42873	164606	4/17/2013	NaN	Concomitant	CALCIUM 500 MG	54	Vit/Min/Prot/Unconv Diet(Human/Animal)	83.0	Year(s)	Male	OTHER SERIOUS (IMPORTANT MEDICAL EVENTS), VISIT...
42858	164596	4/17/2013	4/5/2013	Suspect	CENTRUM SILVER WOMEN'S 50+ MULTIMINERALS MULT...	54	Vit/Min/Prot/Unconv Diet(Human/Animal)	86.0	Year(s)	Female	OTHER SERIOUS (IMPORTANT MEDICAL EVENTS)
45392	168433	7/30/2013	NaN	Suspect	BENEFIBER WITH WHEAT DEXTROTRIN (NCH) (WHEAT DEXT...	54	Vit/Min/Prot/Unconv Diet(Human/Animal)	54.0	Year(s)	Female	OTHER SERIOUS (IMPORTANT MEDICAL EVENTS)

90786 rows × 12 columns

In [29]:

Out[29]:

port #	RA_CAERS_Created Date	AEC_Event_Start Date	PRI_Product_Role	PRI_Reported_Brand/Product Name	PRI_FDA_Industry_Code	PRI_FDA_Industry_Name	CI_Age_at_Adverse_Event	CI_Age_Unit	CI_Gender	AEC_One_Row_Outcomes	SYM_One_Row_Coded_Symptoms
325	1/1/2004	8/4/2003	Suspect	MIDWEST COUNTRY FAIR CHOCOLATE FLAVORED CHIPS	3	Bakery Prod/Dough/Mix/Icing	2.0	Year(s)	Female	VISITED AN ER, VISITED A HEALTH CARE PROVIDER...	SWELLING FACE, RASH, WHEEZING, COUGH, HOSPITAL...
325	1/1/2004	8/4/2003	Suspect	MIDWEST COUNTRY FAIR CHOCOLATE FLAVORED CHIPS	3	Bakery Prod/Dough/Mix/Icing	2.0	Year(s)	Female	VISITED AN ER, VISITED A HEALTH CARE PROVIDER...	SWELLING FACE, WHEEZING, COUGH, RASH, HOSPITAL...
333	1/1/2004	NaN	Suspect	KROGER CLASSIC CREAM-DE-MINT CANDY MINT CHIP I...	13	Ice Cream Prod	NaN	Not Available	Female	VISITED AN ER	NAUSEA, DYSGEUSIA, DIARRHOEA
335	1/1/2004	11/24/2003	Suspect	ENFAMIL LIPIL BABY FORMULA	40	Baby Food Prod	3.0	Month(s)	Not Available	NON-SERIOUS INJURIES/ILLNESS	GASTROINTESTINAL DISORDER, VOMITING
336	1/1/2004	NaN	Suspect	ENFAMIL LIPIL BABY FORMULA	40	Baby Food Prod	NaN	Not Available	Not Available	VISITED A HEALTH CARE PROVIDER	GASTROINTESTINAL DISORDER, PHYSICAL EXAMINATION
...
516	6/29/2017	1/20/2017	Concomitant	CALTRATE CALCIUM	54	Vit/Min/Prot/Unconv Diet(Human/Animal)	66.0	Year(s)	Female	HOSPITALIZATION, VISITED AN ER	SWELLING
516	6/29/2017	1/20/2017	Concomitant	VITAMIN D3	54	Vit/Min/Prot/Unconv Diet(Human/Animal)	66.0	Year(s)	Female	HOSPITALIZATION, VISITED AN ER	SWELLING
516	6/29/2017	1/20/2017	Suspect	SUPERIOR PREFERENCE HAIR COLORING	53	Cosmetics	66.0	Year(s)	Female	HOSPITALIZATION, VISITED AN ER	SWELLING
604	6/30/2017	NaN	Suspect	DR. PERICONE NECK & CHEST CREAM	53	Cosmetics	NaN	Not Available	Female	NON-SERIOUS INJURIES/ILLNESS	URTICARIA, RASH
610	6/30/2017	NaN	Suspect	DR. PERICONE NECK & CHEST CREAM	53	Cosmetics	NaN	Not Available	Not Available	NON-SERIOUS INJURIES/ILLNESS	URTICARIA, RASH

12 columns

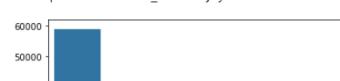
In [33]: `import seaborn as sb`

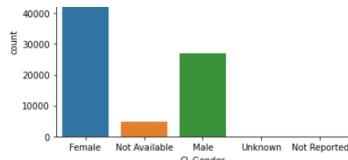
In [34]: `sb.countplot(df['CI_Gender'])`

```
C:\Users\Berni\anaconda3\lib\site-packages\seaborn\_decorators.py:36: FutureWarning: Pass the following variable as a keyword argument to x. From version 0.12, the only valid positional argument will be 'data', and passing other arguments without an explicit keyword will result in an error or misinterpretation.
    warnings.warn(

```

Out[34]: <AxesSubplot:xlabel='CI_Gender', ylabel='count'>





```
In [39]: df['CI_Age at Adverse Event'].median()
```

```
Out[39]: 53.0
```

```
In [40]: df.median()
```

```
C:\Users\Berni\AppData\Local\Temp\ipykernel_1704\530051474.py:1: FutureWarning: Dropping of nuisance columns in DataFrame reductions (with 'numeric_only=True') is deprecated; in a future version this will raise TypeError. Select only valid columns before calling the reduction.
df.median()
```

```
Out[40]: RA_Report #           168433.0
PRI_FDA_Industry_Code      54.0
CI_Age at Adverse Event    53.0
dtype: float64
```

```
In [41]: df.groupby(['SYM_One Row Coded Symptoms'])
```

```
Out[41]: <pandas.core.groupby.generic.DataFrameGroupBy object at 0x000014B964F6B20>
```

```
In [42]: country_group = df.groupby(['SYM_One Row Coded Symptoms'])
```

```
In [45]: country_group.get_group('NAUSEA, DYSGEUSIA, DIARRHOEA')
```

```
Out[45]:
```

RA_Report #	RA_CAEARS_Created Date	AEC_Event_Start Date	PRI_Product_Role	PRI_Reported_Brand/Product Name	PRI_FDA_Industry_Code	PRI_FDA_Industry_Name	CI_Age at_Adverse Event	CI_Age_Unit	CI_Gender	AEC_One_Row_Outcomes	SYM_One_Row_Coded_Symptoms
2	65333	1/1/2004	Nan	Suspect KROGER CLASSIC CREAM- DE-MINT CANDY MINT CHIP I...	13	Ice Cream Prod	NaN	Not Available	Female	VISITED AN ER	NAUSEA, DYSGEUSIA, DIARRHOEA

```
In [46]: sb.countplot(df['SYM_One Row Coded Symptoms'])
```

```
C:\Users\Berni\anaconda3\lib\site-packages\seaborn\_decorators.py:36: FutureWarning: Pass the following variable as a keyword argument to the function: 'x'. From version 0.12, the only valid positional argument will be 'data', and passing other arguments without an explicit keyword will result in an error or misinterpretation.
warnings.warn(
```

```
Out[46]: <AxesSubplot:xlabel='SYM_One Row Coded Symptoms', ylabel='count'>
```

```
In [ ]: country_group['CI_Gender'].value_counts().head(50)
```

```
In [ ]: sb.countplot(df['health'])
```

```
In [ ]:
```