

Double-click (or enter) to edit

```
filepath = '/content/chocolate.csv'
import numpy as np
import pandas as pd
```

```
choc = pd.read_csv(filepath)
choc
```

	ref	company_manufacturer	company_location	review_date	country_of_bean_origin
0	2454	5150	U.S.A.	2019	Tanzania
1	2458	5150	U.S.A.	2019	Dominican Republic
2	2454	5150	U.S.A.	2019	Madagascar
3	2542	5150	U.S.A.	2021	Fiji
4	2546	5150	U.S.A.	2021	Venezuela
...	...	...	...	...	...
2525	1205	Zotter	Austria	2014	Blend
2526	1996	Zotter	Austria	2017	Colombia
2527	2036	Zotter	Austria	2018	Blend
2528	2170	Zotter	Austria	2018	Congo
2529	2170	Zotter	Austria	2018	Belize

2530 rows × 10 columns



```
choc.columns
```

```
Index(['ref', 'company_manufacturer', 'company_location', 'review_date',
      'country_of_bean_origin', 'specific_bean_origin_or_bar_name',
      'cocoa_percent', 'ingredients', 'most_memorable_characteristics',
      'rating'],
      dtype='object')
```

```
#Renaming
```

```
choc.rename(columns = {'company_location': 'Company'}, inplace = True)
choc
```

	company_manufacturer	Company	review_date	Bean_Origin	specific_bean_origin_or_l
0	5150	U.S.A.	2019	Tanzania	Kokoa Kami
1	5150	U.S.A.	2019	Dominican Republic	Zorza
2	5150	U.S.A.	2019	Madagascar	Bejofo Estat
3	5150	U.S.A.	2021	Fiji	Matasawalev
4	5150	U.S.A.	2021	Venezuela	Sur del Lag
...	...	...	...	...	
2525	Zotter	Austria	2014	Blend	
2526	Zotter	Austria	2017	Colombia	APROCAF
2527	Zotter	Austria	2018	Blend	Dry Aged, 30 yr Anniv
2528	Zotter	Austria	2018	Congo	Mountains of
2529	Zotter	Austria	2018	Belize	I



Next steps: [View recommended plots](#)

```
#Renaming/shorten the name of country of bean origin
choc.rename(columns = {'country_of_bean_origin': 'Bean_Origin'}, inplace = True)
choc
```

	company_manufacturer	Company	review_date	Bean_Origin	specific_bean_origin_or_l
0	5150	U.S.A.	2019	Tanzania	Kokoa Kami
1	5150	U.S.A.	2019	Dominican Republic	Zorza
2	5150	U.S.A.	2019	Madagascar	Bejofo Estat
3	5150	U.S.A.	2021	Fiji	Matasawalev
4	5150	U.S.A.	2021	Venezuela	Sur del Lag
...	...	...	...	...	
2525	Zotter	Austria	2014	Blend	
2526	Zotter	Austria	2017	Colombia	APROCAF
2527	Zotter	Austria	2018	Blend	Dry Aged, 30 yr Anniv
2528	Zotter	Austria	2018	Congo	Mountains of
2529	Zotter	Austria	2018	Belize	I



Next steps: [View recommended plots](#)

```
#Removing the ref
choc.drop(['ref'], axis = 1 , inplace=True)
choc
```

	company_manufacturer	Company	review_date	Bean_Origin	specific_bean_origin_or_l
0	5150	U.S.A.	2019	Tanzania	Kokoa Kami
1	5150	U.S.A.	2019	Dominican Republic	Zorza
2	5150	U.S.A.	2019	Madagascar	Bejofo Estat
3	5150	U.S.A.	2021	Fiji	Matasawalev
4	5150	U.S.A.	2021	Venezuela	Sur del Lag
...	...	...	...	...	
2525	Zotter	Austria	2014	Blend	
2526	Zotter	Austria	2017	Colombia	APROCAF
2527	Zotter	Austria	2018	Blend	Dry Aged, 30 yr Anniv
2528	Zotter	Austria	2018	Congo	Mountains of
2529	Zotter	Austria	2018	Belize	I

```
##All chocolate ratings below 2
rate2 = choc[choc['rating'] <= 2].copy()
rate2
```



	company_manufacturer	Company	review_date	Bean_Origin	specific_bean_origin_o
158	Artisan du Chocolat	U.K.	2009	Brazil	Br
164	Artisan du Chocolat	U.K.	2010	Venezuela	
293	Bonnat	France	2006	Blend	(
323	Bouga Cacao (Tulicorp)	Ecuador	2009	Ecuador	El Oro, Hac
373	Cacao Barry	France	2007	Venezuela	
375	Cacao Barry	France	2008	Tanzania	
426	Cacaoyere (Ecuadoriana)	Ecuador	2008	Ecuador	
430	Callebaut	Belgium	2007	Ecuador	
448	Caoni (Tulicorp)	Ecuador	2008	Ecuador	
470	Casa	U.S.A.	2018	Blend	Ecua
590	Claudio Corallo	Sao Tome	2008	Blend	Principe, Sao Tom
626	Coppeneur	Germany	2012	Ecuador	Ecuad
632	Cote d' Or (Kraft)	Belgium	2006	Blend	Sensat
763	Dolfin (Belcolade)	Belgium	2006	Blend	
862	Escazu	U.S.A.	2009	Costa Rica	
883	Felchlin	Switzerland	2006	Blend	!
947	French Broad	U.S.A.	2012	Peru	Palo Blanco w/ panela, Ch
1106	Habitual	Canada	2014	Blend	
1165	Hoja Verde (Tulicorp)	Ecuador	2009	Ecuador	
1180	Hotel Chocolat	U.K.	2013	St. Lucia	Island Growers, 2012, 12
1235	Jacque Torres	U.S.A.	2006	Ghana	Trinata
1283	Ki' Xocolatl	Mexico	2009	Mexico	
1404	Love Bar	U.S.A.	2015	Nicaragua	
1423	Machu Picchu Trading Co.	Peru	2011	Peru	
1442	Maglio	Italy	2008	Tanzania	
1446	Majani	Italy	2010	Ecuador	
1574	Michel Cluizel	France	2006	Blend	
1575	Michel Cluizel	France	2006	Blend	Carr
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1576	Michel Cluizel	France	2006	Blend	
1587	Middlebury	U.S.A.	2012	Blend	
1588	Middlebury	U.S.A.	2012	Bolivia	
1676	Neuhaus (Callebaut)	Belgium	2006	Blend	
1679	Neuhaus (Callebaut)	Belgium	2007	Blend	
1744	Olivia	Canada	2011	Blend	Cà
1776	Pacari	Ecuador	2008	Ecuador	
1891	Pralus	France	2008	Dominican Republic	Dominican Repu
1894	Pralus	France	2009	Venezuela	
2017	S.A.I.D.	Italy	2010	Blend	
2029	Santander (Compania Nacional)	Colombia	2006	Colombia	Colombia
2035	Scharffen Berger	U.S.A.	2006	Blend	
2036	Scharffen Berger	U.S.A.	2006	Blend	Kumasi Sambira
2037	Scharffen Berger	U.S.A.	2006	Jamaica	Jamaica
2072	Shark's	U.S.A.	2011	U.S.A.	Hawai
2118	Snake & Butterfly	U.S.A.	2011	Ghana	
2294	TCHO	U.S.A.	2016	Blend	
2295	Tejas	U.S.A.	2012	Peru	
2322	Thos	U.S.A.	2007	Venezuela	Venezuela: Barinas, Mai

```
##All chocolate ratings above 3
rate3 = choc[choc['rating'] >= 3].copy()
rate3
```

	company_manufacturer	Company	review_date	Bean_Origin	specific_bean_origin_or_l
0	5150	U.S.A.	2019	Tanzania	Kokoa Kami
1	5150	U.S.A.	2019	Dominican Republic	Zorza