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Part 1: Comprehensive Report

Introduction

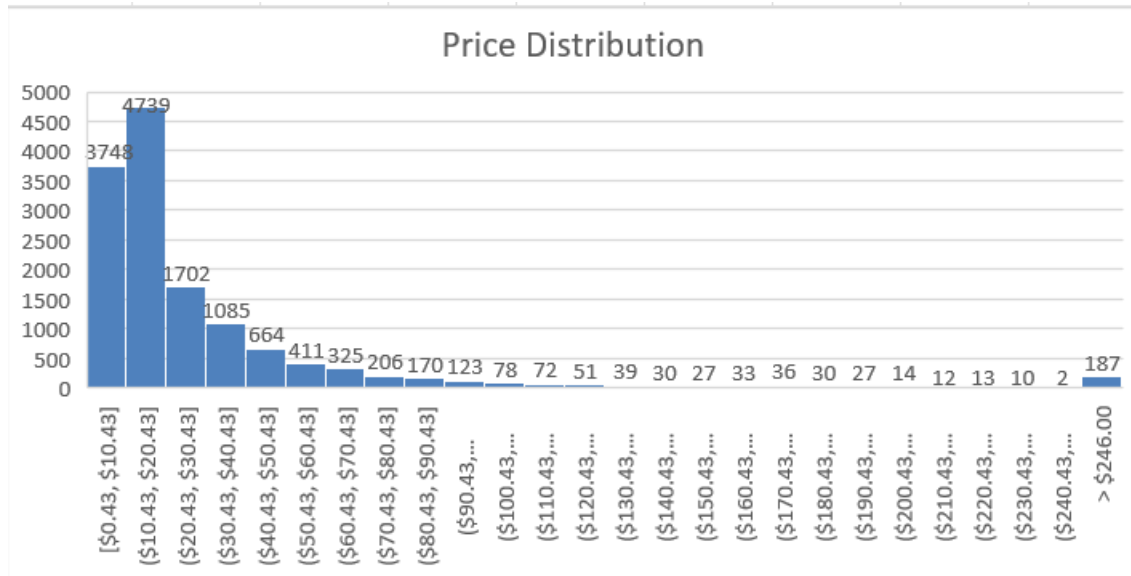
According to the data from Vivino Wines, we have a data from the IT department with the Wineries, the origin country, and their ratings from customers.

This data also provides the Year of the wine to understand the age of the wine. Hereby is a data dictionary for better understanding of the data for the team-

Data	Description
Product ID	This is an unique identifier for the Wines
Name	Name of the Wines
Winery	Name of the manufacturing winery
Wine Type	Shows the type of wine- Red Wine/White Wine
Year	Year of Manufacturing
Price	Price of the Wine
Region	Region of Origin of the Wine
Country	Country of Origin of the Wine
Rating	Customer rating of the wine
Number of Ratings	Number of Customer ratings

The data has 2.6M reviews and their scores that ranges from 2.2 to 4.9 points. Performing an analysis of the data we see the following,

Looking at the histogram below,



Insights

We see that most of the wines are priced in between \$10.43 and \$20.43 with **4739** wines followed by most of the wines priced in between \$0.43 and \$10.43 that has **3748** wines. We see that **187** wines are priced above \$246.00. As an organization, we must focus on the price range of \$10.43-\$20.43 as they have the maximum products which caters to a larger market.

Let's look at a box plot analysis of the data-



Further Insights

According to the box and whisker chart, we see that the least priced wine is \$0.43. Most of the wines are in the range of \$9.90 to \$32.50. We have an upper quartile of \$66.31 and there are around 1.3k wines that are priced above the \$66.31. Most of the wines are priced at \$15.95.

Investment Opportunity

In this report, we will be analysing an investment to expand into the Wine market. To invest, we looking at the following data-

- Price points of most of the wines
- Average ratings of the winery

According to the box plot above, we see that most of the wines are priced at a range of \$9.90 to \$32.50 with a mean price of \$15.95. Thus, we must focus on wines between this range.

Also, the average ratings of the winery is a good factor to consider as we have a large number of reviews from customers which will give us the best understanding of what the customers like, that will give us maximum profits. In this case, we will consider any winery with an average more than 4.0.

Winery	Number Of Ratings	Average of Rating
Markus Molitor	20	4.045
Château Purcari	12	4.15
Schneider	10	4.14
Van Volxem	10	4.04
Terlan (Terlano)	9	4.066666667

Part 2: Excel Steps

Task 1: Import all the files to Excel and fill empty columns-

1. Open Excel File-

Open the Wine.xlsx file.

Files > Open > select the Wine.xlsx

When opened, it should have one worksheet named Wine with the wine data look like in Fig1.

Create a Table with the name 'Wine'.

Product	Name	Winery	WineType	Year	Price	Region	Country	Rating	NumberOfRatings
p000000	Gaia & Rey Langhe 2017	Gaia	White Wine	2017	\$184.2	Langhe			
p000001	Pago Negralada Tempranillo 2015	Abadia Retuerta	Red Wine	2015	\$67.26	Castilla y León			
p000002	Taló Primitivo di Manduria 2018	San Marzano	Red Wine	2018	\$8.4	Primitivo di Manduria			
p000003	Reserva Sauvignon Blanc 2016	Calterra	White Wine	2016	\$8.72	Central Valley			
p000004	Cabernet Sauvignon 2016	Bogle	Red Wine	2016	\$16.39	California			
p000005	Old Vines Primitivo 2015	Azienda Agricola	Red Wine	2015	\$38.7	Puglia			
p000006	Castillon - Côtes de Bordeaux 2011	Château Cap de F.	Red Wine	2016	\$15.95	Castillon - Côtes de Bordeaux			
p000007	Syrah 2017	Seifried Estate	Red Wine	2017	\$16.77	Nelson			
p000008	Paradies Riesling 2018	Korrell	White Wine	2018	\$22.7	Nahe			
p000009	Ungeheuer GG 2018	Von Winning	White Wine	2018	\$34.0	Pfalz			
p000010	Vinho Verde 2017	Casa de Vila Nova	White Wine	2017	\$8.92	Vinho Verde			
p000011	Castillo de Enguera Reserva 2015	Finca Enguera	Red Wine	2015	\$8.95	Valencia			
p000012	Cistus Rouge Faugères 2017	Château de la Liq	Red Wine	2017	\$19.3	Languedoc			
p000013	Prestige Cabernet Sauvignon 2018	Wilhelm Walch	Red Wine	2018	\$12.0	Südtirol - Alto Adige			
p000014	Chardonnay 2016	Food Truck	White Wine	2016	\$8.67	McLaren Vale			
p000015	The Whip White Blend 2017	Murrieta's Well	White Wine	2017	\$36.31	Livermore Valley			
p000016	Grau - und Weissburgunder Langer	Weingut Bründlm	White Wine	2016	\$20.54	Niederösterreich			
p000017	Riesling Brut 2016	Reichsrat von Buh	Sparkling Wine	2016	\$14.9	Pfalz			
p000018	Barolo 2010	Aurelio Settimo	Red Wine	2010	\$39.19	Barolo			
p000019	Otazu Premium Cuvée 2016	Bodega Otazu	Red Wine	2016	\$8.99	Navarra			
p000020	Sperber Pinot Noir 2013	Salvey	Red Wine	2013	\$35.74	Baden			
p000021	Pinotage 2017	Aaldering	Red Wine	2017	\$22.9	Stellenbosch			
p000022	Tannat (Grande Vindima) 2010	Lidio Carraro	Red Wine	2010	\$73.06	Encruzilhada do Sul			
p000023	In Signo Leonis 2015	Heribert Bayer	Red Wine	2015	\$35.09	Burgenland			
p000024	Gran Reserva 2018	Escudo Rojo	Red Wine	2018	\$11.83	Maipo Valley			
p000025	Tenuta Greppone Mazzi Brunello d	Ruffino	Red Wine	2013	\$50.67	Brunello di Montalcino			

Fig 1

2. Import XML file

Create a new sheet and Import Data from Region.xml as seen in Fig 2.

Data>Get Data>From File>From XML

When opened, rename the Sheet to Region and rename the Table to Region as seen in Fig.3.

Rename the table to Region by going to Table Design> Under Properties, change the Table Name.

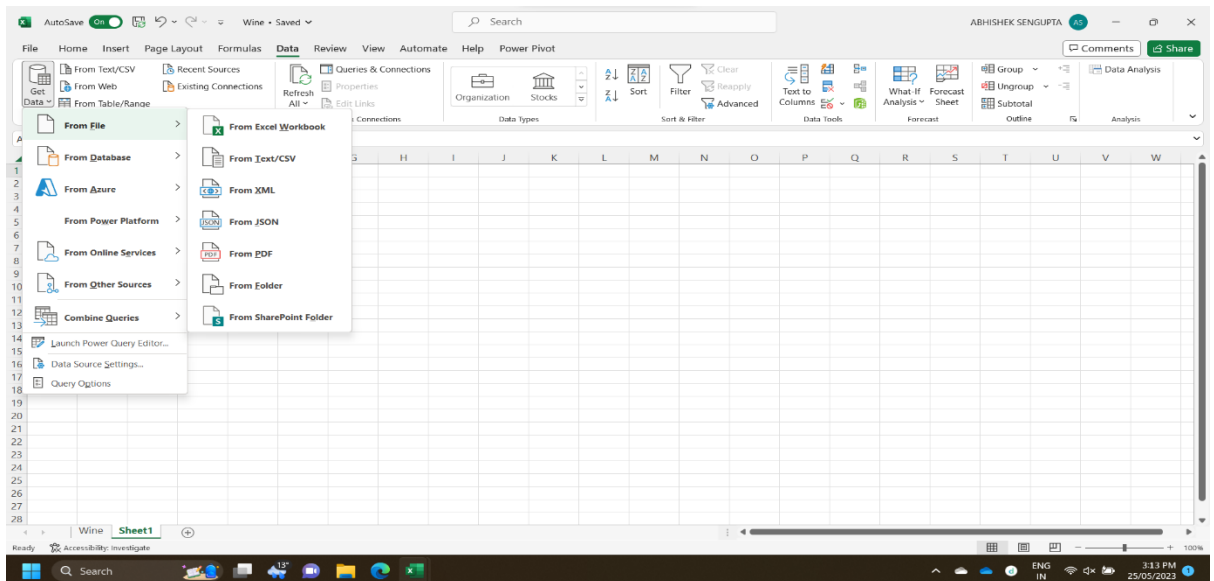


Fig 2

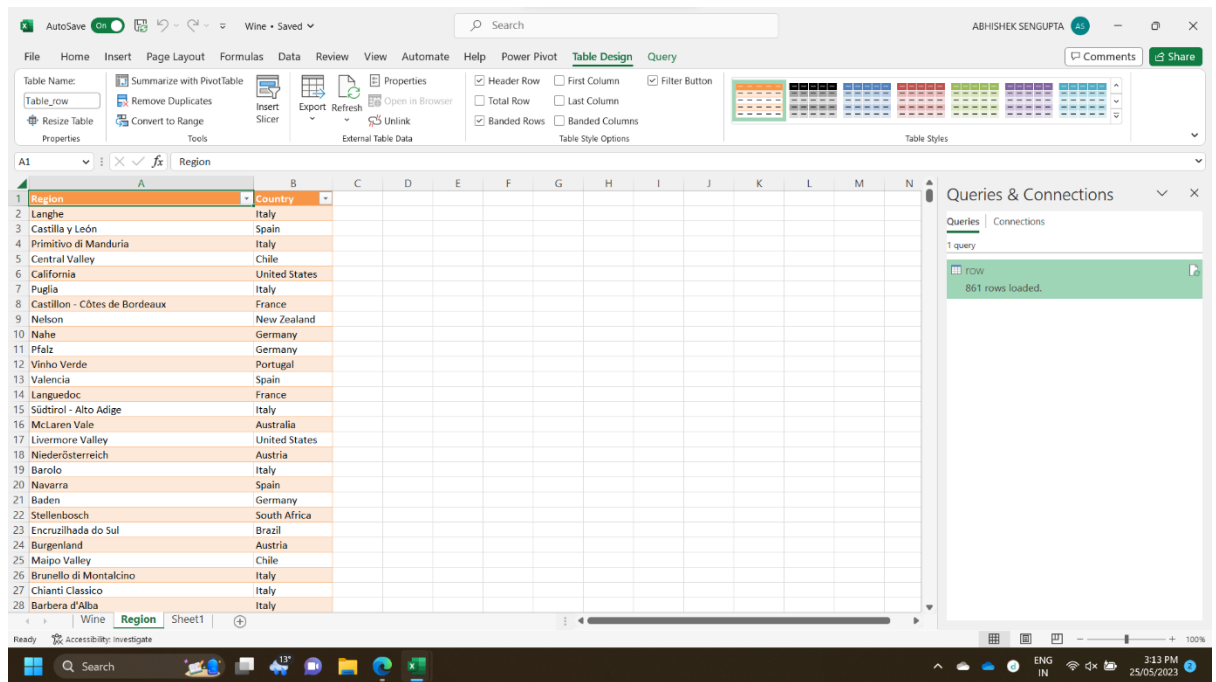


Fig 3

3. Import TXT file-

Open the txt data in Notepad++ and replace the spaces with “,” as seen in Fig 4. This will arrange the data properly to import to Excel.

Create a new Sheet in Excel and Import the text file-

Go to Data> Get Data> Select From Text/CSV, similar to as seen in Fig 2. Output will be as seen as Fig 5.

Rename the Table to ‘WineRating’ by going to Table Design> Under Properties, change the Table Name.

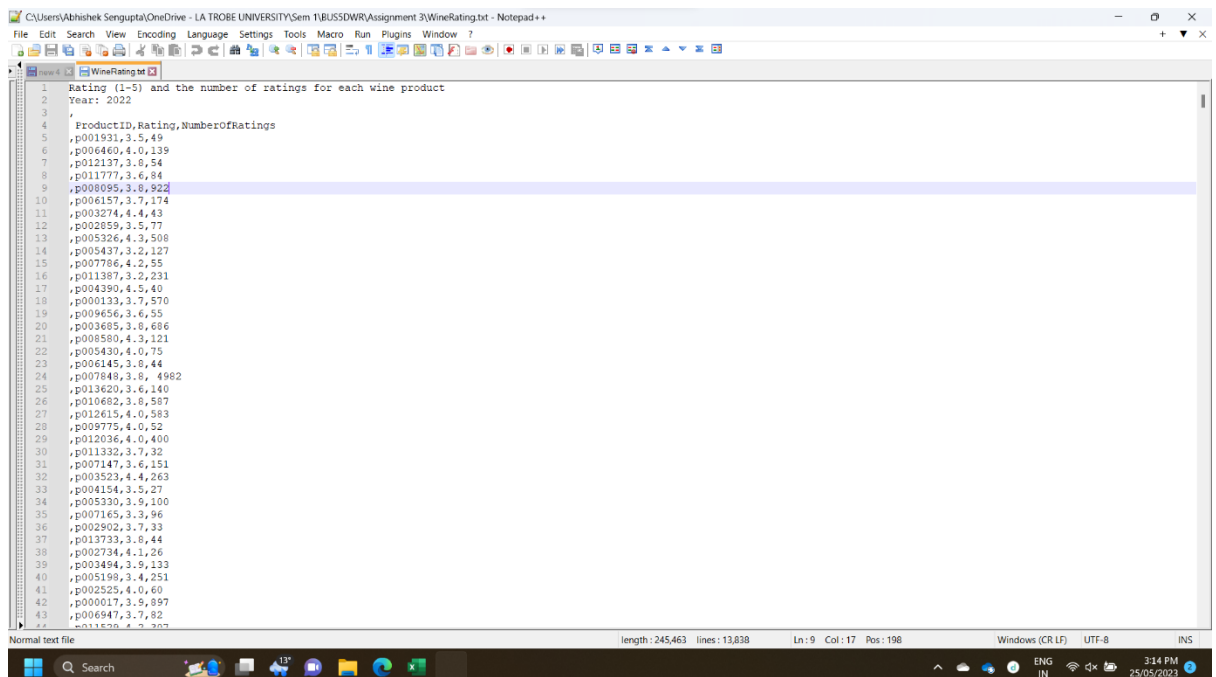


Fig 4

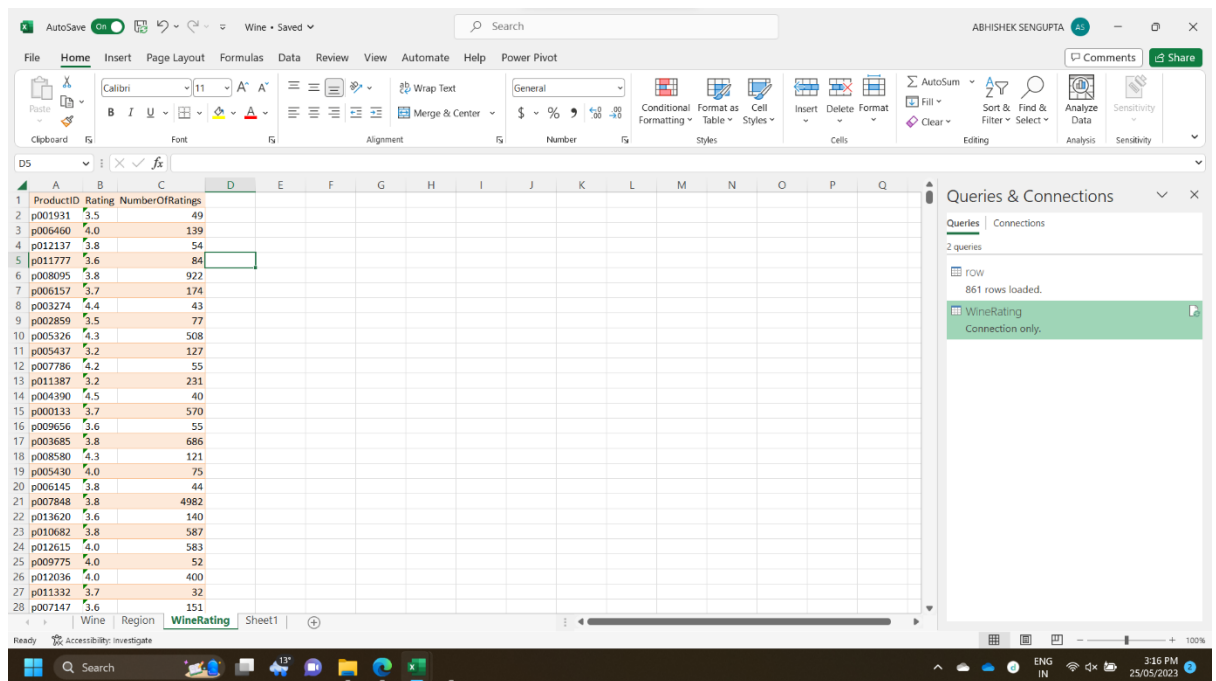


Fig 5

4. Fill empty columns with data using XLOOKUP-

To fill the empty columns, as seen in Fig 1, use XLOOKUP with the Region and WineRating Sheets.

Use the formula, `=XLOOKUP([@ProductID],WineRating[[ProductID]],WineRating[Rating])` in order to get the Ratings of the wine, as seen in Fig 6.

Use the formula, `=XLOOKUP([@ProductID],WineRating[[ProductID]],WineRating[NumberOfRatings])` in order to get the Number of Ratings, as seen in Fig 7.

ProductID	Name	Winery	WineType	Year	Price	Region	Country	Rating	NumberOfRatings
p000000	Gaia & Rey Langhe 2017	Gaja	White Wine	2017	\$184.20	Langhe	Italy	4.5	121
p000001	Pago Negrallada Tempranillo 2015	Abadia Retuerta	Red Wine	2015	\$67.26	Castilla y León	Spain	4.2	269
p000002	Taló Primitivo di Manduria 2018	San Marzano	Red Wine	2018	\$8.40	Primitivo di Manduria	Italy	4.1	337
p000003	Reserva Sauvignon Blanc 2016	Calterra	White Wine	2016	\$8.72	Central Valley	Chile	3.5	293
p000004	Cabernet Sauvignon 2016	Bogle	Red Wine	2016	\$16.39	California	United States	3.7	3375
p000005	Old Vines Primitivo 2015	Azienda Agricola F	Red Wine	2015	\$38.70	Puglia	Italy	4.2	100
p000006	Castillon - Côtes de Bordeaux 2011	Château Cap de F	Red Wine	2016	\$15.95	Castillon - Côtes de Bordeaux	France	3.7	213
p000007	Syrah 2017	Selfried Estate	Red Wine	2017	\$16.77	Nelson	New Zealand	3.3	40
p000008	Paradies Riesling 2018	Korrell	White Wine	2018	\$22.70	Nahe	Germany	4.1	27
p000009	Ungeheuer GG 2018	Von Winning	White Wine	2018	\$34.00	Pfalz	Germany	4.3	29
p000010	Vinho Verde 2017	Casa de Vila Nova	White Wine	2017	\$8.92	Vinho Verde	Portugal	3.9	619
p000011	Castillo de Enguera Reserva 2015	Finca Enguera	Red Wine	2015	\$8.95	Valencia	Spain	3.7	32
p000012	Cistus Rouge Faugères 2017	Château de la Lique	Red Wine	2017	\$19.30	Languedoc	France	3.7	39
p000013	Prestige Cabernet Sauvignon 2018	Wilhelm Walch	Red Wine	2018	\$12.00	Südtirol - Alto Adige	Italy	3.4	30
p000014	Chardonnay 2016	Food Truck	White Wine	2016	\$8.67	McLaren Vale	Australia	3.3	35
p000015	The Whip White Blend 2017	Murrieta's Well	White Wine	2017	\$26.31	Livermore Valley	United States	3.8	80
p000016	Grau - und Weissburgunder Langer	Weingut Bründlm	White Wine	2016	\$20.54	Niederösterreich	Austria	3.9	34
p000017	Riesling Brut 2016	Reichsrat von Buh	Sparkling Wine	2016	\$14.90	Pfalz	Germany	3.9	897
p000018	Barolo 2010	Aurelio Settimo	Red Wine	2010	\$39.19	Barolo	Italy	3.9	141
p000019	Otazu Premium Cuvée 2016	Bodega Otazu	Red Wine	2016	\$8.99	Navarra	Spain	3.9	301
p000020	Sperber Pinot Noir 2013	Salvey	Red Wine	2013	\$35.74	Baden	Germany	3.9	25
p000021	Pinotage 2017	Aaldering	Red Wine	2017	\$22.90	Stellenbosch	South Africa	4.1	237
p000022	Tannat (Grande Vindima) 2010	Lidio Carraro	Red Wine	2010	\$73.06	Encruzilhada do Sul	Brazil	4	326
p000023	In Signo Leonis 2015	Heribert Bayer	Red Wine	2015	\$35.09	Burgenland	Austria	4.2	32
p000024	Gran Reserva 2018	Escudo Rojo	Red Wine	2018	\$11.83	Maipo Valley	Chile	3.7	380
p000025	Tenuta Greppone Mazzi Brunello di Ruffino		Red Wine	2013	\$50.67	Brunello di Montalcino	Italy	4.2	710

Fig 6

ProductID	Name	Winery	WineType	Year	Price	Region	Country	Rating	NumberOfRatings
p000000	Gaia & Rey Langhe 2017	Gaja	White Wine	2017	\$184.20	Langhe	Italy	4.5	121
p000001	Pago Negrallada Tempranillo 2015	Abadia Retuerta	Red Wine	2015	\$67.26	Castilla y León	Spain	4.2	269
p000002	Taló Primitivo di Manduria 2018	San Marzano	Red Wine	2018	\$8.40	Primitivo di Manduria	Italy	4.1	337
p000003	Reserva Sauvignon Blanc 2016	Calterra	White Wine	2016	\$8.72	Central Valley	Chile	3.5	293
p000004	Cabernet Sauvignon 2016	Bogle	Red Wine	2016	\$16.39	California	United States	3.7	3375
p000005	Old Vines Primitivo 2015	Azienda Agricola F	Red Wine	2015	\$38.70	Puglia	Italy	4.2	100
p000006	Castillon - Côtes de Bordeaux 2011	Château Cap de F	Red Wine	2016	\$15.95	Castillon - Côtes de Bordeaux	France	3.7	213
p000007	Syrah 2017	Selfried Estate	Red Wine	2017	\$16.77	Nelson	New Zealand	3.3	40
p000008	Paradies Riesling 2018	Korrell	White Wine	2018	\$22.70	Nahe	Germany	4.1	27
p000009	Ungeheuer GG 2018	Von Winning	White Wine	2018	\$34.00	Pfalz	Germany	4.3	29
p000010	Vinho Verde 2017	Casa de Vila Nova	White Wine	2017	\$8.92	Vinho Verde	Portugal	3.9	619
p000011	Castillo de Enguera Reserva 2015	Finca Enguera	Red Wine	2015	\$8.95	Valencia	Spain	3.7	32
p000012	Cistus Rouge Faugères 2017	Château de la Lique	Red Wine	2017	\$19.30	Languedoc	France	3.7	39
p000013	Prestige Cabernet Sauvignon 2018	Wilhelm Walch	Red Wine	2018	\$12.00	Südtirol - Alto Adige	Italy	3.4	30
p000014	Chardonnay 2016	Food Truck	White Wine	2016	\$8.67	McLaren Vale	Australia	3.3	35
p000015	The Whip White Blend 2017	Murrieta's Well	White Wine	2017	\$26.31	Livermore Valley	United States	3.8	80
p000016	Grau - und Weissburgunder Langer	Weingut Bründlm	White Wine	2016	\$20.54	Niederösterreich	Austria	3.9	34
p000017	Riesling Brut 2016	Reichsrat von Buh	Sparkling Wine	2016	\$14.90	Pfalz	Germany	3.9	897
p000018	Barolo 2010	Aurelio Settimo	Red Wine	2010	\$39.19	Barolo	Italy	3.9	141
p000019	Otazu Premium Cuvée 2016	Bodega Otazu	Red Wine	2016	\$8.99	Navarra	Spain	3.9	301
p000020	Sperber Pinot Noir 2013	Salvey	Red Wine	2013	\$35.74	Baden	Germany	3.9	25
p000021	Pinotage 2017	Aaldering	Red Wine	2017	\$22.90	Stellenbosch	South Africa	4.1	237
p000022	Tannat (Grande Vindima) 2010	Lidio Carraro	Red Wine	2010	\$73.06	Encruzilhada do Sul	Brazil	4	326
p000023	In Signo Leonis 2015	Heribert Bayer	Red Wine	2015	\$35.09	Burgenland	Austria	4.2	32
p000024	Gran Reserva 2018	Escudo Rojo	Red Wine	2018	\$11.83	Maipo Valley	Chile	3.7	380
p000025	Tenuta Greppone Mazzi Brunello di Ruffino		Red Wine	2013	\$50.67	Brunello di Montalcino	Italy	4.2	710

Fig 7

Task 2- Clean the data

We see that the data is not formatted properly. The column “Year” has values with No Value or N.V. we replace the same with “-”.

To format the year properly, use the formula, as seen below and in Fig 8-

=IF([@Year]="N.V.", "-",[@Year])

The screenshot shows the Excel interface with the formula bar displaying the formula `=IF([@Year]="N.V.", "-",[@Year])`. The table below contains wine data with columns for WineType, Year, Price, Region, Country, Rating, NumberOfRatings, CleanYear, CleanPrice, and Clean Name.

WineType	Year	Price	Region	Country	Rating	NumberOfRatings	CleanYear	CleanPrice	Clean Name
fine	2017	\$184.20	Langhe	Italy	4.5	121	2017	\$184.20	Gaia & Rey Langhe
ie	2015	\$67.26	Castilla y León	Spain	4.2	269	2015	\$67.26	Pago Negralada Tempranillo
ie	2018	\$8.40	Primitivo di Manduria	Italy	4.1	337	2018	\$8.40	Talò Primitivo di Manduria
fine	2016	\$8.72	Central Valley	Chile	3.5	293	2016	\$8.72	Reserva Sauvignon Blanc
ie	2016	\$16.39	California	United States	3.7	3375	2016	\$16.39	Cabernet Sauvignon
ie	2015	\$38.70	Puglia	Italy	4.2	100	2015	\$38.70	Old Vines Primitivo
ie	2016	\$15.95	Castillon - Côtes de Bordeaux	France	3.7	213	2016	\$15.95	Castillon - Côtes de Bordeaux
ie	2017	\$16.77	Nelson	New Zealand	3.3	40	2017	\$16.77	Syrah
fine	2018	\$22.70	Nahe	Germany	4.1	27	2018	\$22.70	Paradies Riesling
fine	2018	\$34.00	Pfalz	Germany	4.3	29	2018	\$34.00	Ungeheuer GG
fine	2017	\$8.92	Vinho Verde	Portugal	3.9	619	2017	\$8.92	Vinho Verde
ie	2015	\$8.95	Valencia	Spain	3.7	32	2015	\$8.95	Castillo de Enguera Reserva
ie	2017	\$19.30	Languedoc	France	3.7	39	2017	\$19.30	Cistus Rouge Faugères
ie	2018	\$12.00	Südtirol - Alto Adige	Italy	3.4	30	2018	\$12.00	Prestige Cabernet Sauvignon
fine	2016	\$8.67	McLaren Vale	Australia	3.3	35	2016	\$8.67	Chardonnay
fine	2017	\$26.31	Livermore Valley	United States	3.8	80	2017	\$26.31	The Whip White Blend
fine	2016	\$20.54	Niederösterreich	Austria	3.9	34	2016	\$20.54	Grau - und Weissburgunder Langenloiser Spiegel
g Wine	2010	\$14.90	Pfalz	Germany	3.9	897	2016	\$14.90	Riesling Brut
ie	2010	\$39.19	Barolo	Italy	3.9	141	2010	\$39.19	Barolo
ie	2016	\$8.99	Navarra	Spain	3.9	301	2016	\$8.99	Otxazu Premium Cuvée
ie	2013	\$35.74	Baden	Germany	3.9	25	2013	\$35.74	Sperber Pinot Noir
ie	2017	\$22.90	Stellenbosch	South Africa	4.1	237	2017	\$22.90	Pinotage
ie	2010	\$73.06	Encruzilhada do Sul	Brazil	4	326	2010	\$73.06	Tannat (Grande Vindima)
ie	2015	\$35.09	Burgenland	Austria	4.2	32	2015	\$35.09	In Signo Leonis
ie	2018	\$11.83	Maipo Valley	Chile	3.7	380	2018	\$11.83	Gran Reserva
ie	2013	\$50.67	Brunello di Montalcino	Italy	4.2	710	2013	\$50.67	Tenuta Greppone Mazzi Brunello di Montalcino

Fig 8

The column “Price” has values which are in General format so we format them using the formula-

=NUMBERVALUE([@Price],".","\$")

The data also includes Prices mentioned in “cents” and “dollars”, we use the Find function in Excel to remove the words cents and dollars as seen in Fig 10.

The screenshot shows the Excel interface with the formula bar displaying the formula `=NUMBERVALUE([@Price],".","$")`. The table below is the same as in Fig 8, but the Price column is now formatted with currency symbols (\$). The Format Shape task pane is visible on the right.

WineType	Year	Price	Region	Country	Rating	NumberOfRatings	CleanYear	CleanPrice	Clean Name
fine	2017	\$184.20	Langhe	Italy	4.5	121	2017	\$184.20	Gaia & Rey Langhe
ie	2015	\$67.26	Castilla y León	Spain	4.2	269	2015	\$67.26	Pago Negralada Tempranillo
ie	2018	\$8.40	Primitivo di Manduria	Italy	4.1	337	2018	\$8.40	Talò Primitivo di Manduria
fine	2016	\$8.72	Central Valley	Chile	3.5	293	2016	\$8.72	Reserva Sauvignon Blanc
ie	2016	\$16.39	California	United States	3.7	3375	2016	\$16.39	Cabernet Sauvignon
ie	2015	\$38.70	Puglia	Italy	4.2	100	2015	\$38.70	Old Vines Primitivo
ie	2016	\$15.95	Castillon - Côtes de Bordeaux	France	3.7	213	2016	\$15.95	Castillon - Côtes de Bordeaux
ie	2017	\$16.77	Nelson	New Zealand	3.3	40	2017	\$16.77	Syrah
fine	2018	\$22.70	Nahe	Germany	4.1	27	2018	\$22.70	Paradies Riesling
fine	2018	\$34.00	Pfalz	Germany	4.3	29	2018	\$34.00	Ungeheuer GG
fine	2017	\$8.92	Vinho Verde	Portugal	3.9	619	2017	\$8.92	Vinho Verde
ie	2015	\$8.95	Valencia	Spain	3.7	32	2015	\$8.95	Castillo de Enguera Reserva
ie	2017	\$19.30	Languedoc	France	3.7	39	2017	\$19.30	Cistus Rouge Faugères
ie	2018	\$12.00	Südtirol - Alto Adige	Italy	3.4	30	2018	\$12.00	Prestige Cabernet Sauvignon
fine	2016	\$8.67	McLaren Vale	Australia	3.3	35	2016	\$8.67	Chardonnay
fine	2017	\$26.31	Livermore Valley	United States	3.8	80	2017	\$26.31	The Whip White Blend
fine	2016	\$20.54	Niederösterreich	Austria	3.9	34	2016	\$20.54	Grau - und Weissburgunder Langenloiser Spiegel
g Wine	2010	\$14.90	Pfalz	Germany	3.9	897	2016	\$14.90	Riesling Brut
ie	2010	\$39.19	Barolo	Italy	3.9	141	2010	\$39.19	Barolo
ie	2016	\$8.99	Navarra	Spain	3.9	301	2016	\$8.99	Otxazu Premium Cuvée
ie	2013	\$35.74	Baden	Germany	3.9	25	2013	\$35.74	Sperber Pinot Noir
ie	2017	\$22.90	Stellenbosch	South Africa	4.1	237	2017	\$22.90	Pinotage
ie	2010	\$73.06	Encruzilhada do Sul	Brazil	4	326	2010	\$73.06	Tannat (Grande Vindima)
ie	2015	\$35.09	Burgenland	Austria	4.2	32	2015	\$35.09	In Signo Leonis
ie	2018	\$11.83	Maipo Valley	Chile	3.7	380	2018	\$11.83	Gran Reserva
ie	2013	\$50.67	Brunello di Montalcino	Italy	4.2	710	2013	\$50.67	Tenuta Greppone Mazzi Brunello di Montalcino

Fig 9

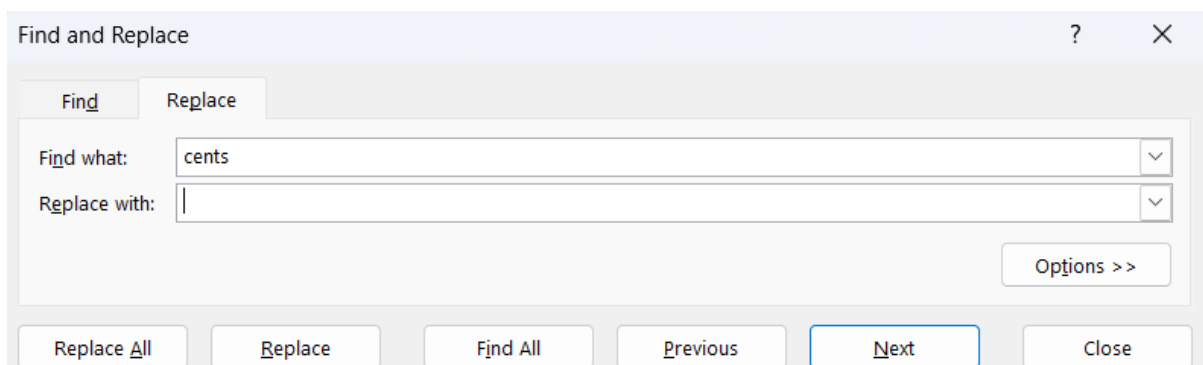


Fig 10

The name of the Wines has the Year at the end which is a repetition of the data as it already exists in the Year. We can remove the same using the formula-

=REPLACE([@Name],FIND([@Year],[@Name]),4,"")

	D	E	F	G	H	I	J	K	L	M
	WineType	Year	Price	Region	Country	Rating	NumberOfRatings	CleanYear	CleanPrice	Clean Name
2	fine	2017	\$184.20	Langhe	Italy	4.5	121	2017	\$184.20	Gaia & Rey Langhe
3	ie	2015	\$67.26	Castilla y León	Spain	4.2	269	2015	\$67.26	Pago Negralada Tempranillo
4	ie	2018	\$8.40	Primitivo di Manduria	Italy	4.1	337	2018	\$8.40	Talò Primitivo di Manduria
5	fine	2016	\$8.72	Central Valley	Chile	3.5	293	2016	\$8.72	Reserva Sauvignon Blanc
6	ie	2016	\$16.39	California	United States	3.7	3375	2016	\$16.39	Cabernet Sauvignon
7	ie	2015	\$38.70	Puglia	Italy	4.2	100	2015	\$38.70	Old Vines Primitivo
8	ie	2016	\$15.95	Castillon - Côtes de Bordeaux	France	3.7	213	2016	\$15.95	Castillon - Côtes de Bordeaux
9	ie	2017	\$16.77	Nelson	New Zealand	3.3	40	2017	\$16.77	Syrah
10	fine	2018	\$22.70	Nahe	Germany	4.1	27	2018	\$22.70	Paradies Riesling
11	fine	2018	\$34.00	Pfalz	Germany	4.3	29	2018	\$34.00	Ungeheuer GG
12	fine	2017	\$8.92	Vinho Verde	Portugal	3.9	619	2017	\$8.92	Vinho Verde
13	ie	2015	\$8.95	Valencia	Spain	3.7	32	2015	\$8.95	Castillo de Enguera Reserva
14	ie	2017	\$19.30	Languedoc	France	3.7	39	2017	\$19.30	Cistus Rouge Faughres
15	ie	2018	\$12.00	Südtirol - Alto Adige	Italy	3.4	30	2018	\$12.00	Prestige Cabernet Sauvignon
16	fine	2016	\$8.67	McLaren Vale	Australia	3.3	35	2016	\$8.67	Chardonnay
17	fine	2017	\$26.31	Livermore Valley	United States	3.8	80	2017	\$26.31	The Whip White Blend
18	fine	2016	\$20.54	Niederösterreich	Austria	3.9	34	2016	\$20.54	Grau- und Weissburgunder Langenloiser Spiegel
19	g Wine	2016	\$14.90	Pfalz	Germany	3.9	897	2016	\$14.90	Riesling Brut
20	ie	2010	\$39.19	Barolo	Italy	3.9	141	2010	\$39.19	Barolo
21	ie	2016	\$8.99	Navarra	Spain	3.9	301	2016	\$8.99	Otrazu Premium Cuvée
22	ie	2013	\$35.74	Baden	Germany	3.9	25	2013	\$35.74	Sperber Pinot Noir
23	ie	2017	\$22.90	Stellenbosch	South Africa	4.1	237	2017	\$22.90	Pinotage
24	ie	2010	\$73.06	Encruzilhada do Sul	Brazil	4	326	2010	\$73.06	Tannat (Grande Vindima)
25	ie	2015	\$35.09	Burgenland	Austria	4.2	32	2015	\$35.09	In Signo Leonis
26	ie	2018	\$11.83	Maipo Valley	Chile	3.7	380	2018	\$11.83	Gran Reserva
27	ie	2013	\$50.67	Brunello di Montalcino	Italy	4.2	710	2013	\$50.67	Tenuta Greppone Mazzi Brunello di Montalcino

Fig 11

Task 3- Wine Price Insights

For better representation of data, create a new Sheet named "Insights".

To create a histogram, go to Insert>Charts> Select Insert Statistic Chart and select Histogram, as seen in Fig 12

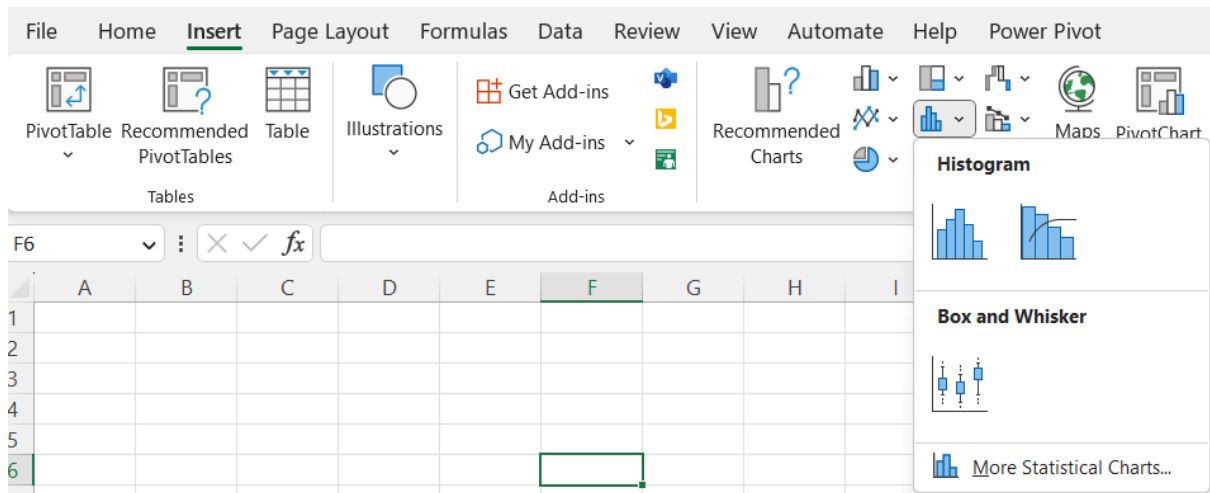


Fig 12

Select Histogram and Right click to Select Data. Select the data source as “CleanPrice” in the Wine Sheet, as seen in Fig 13.

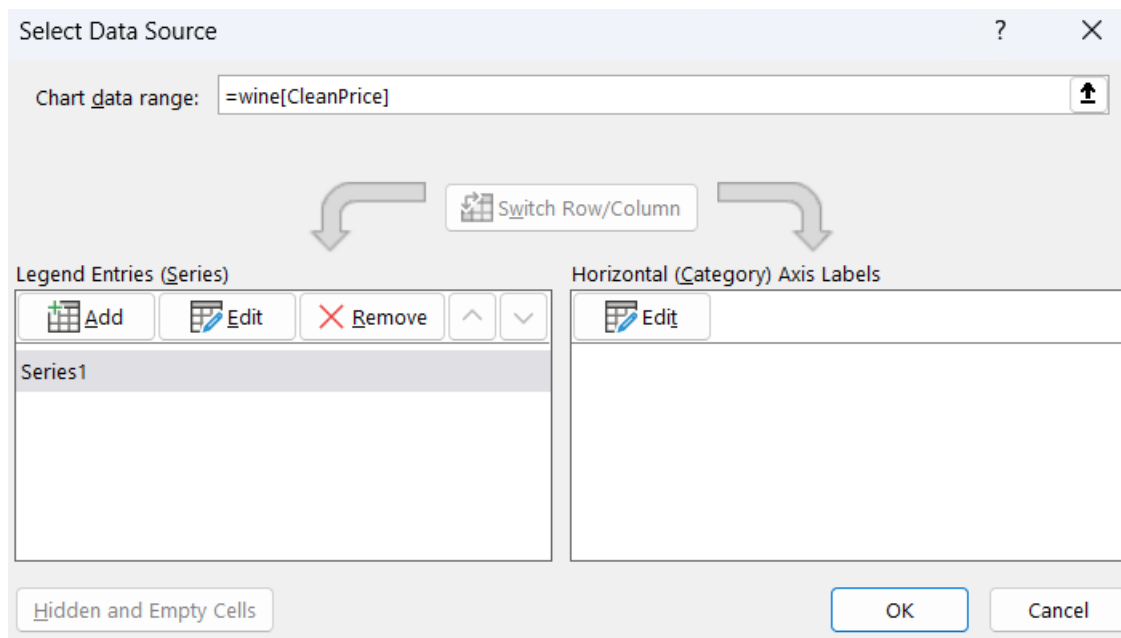


Fig 13

Select the Axis Options and Enable Overflow bin to get a better insight into the data, as seen in Fig 14

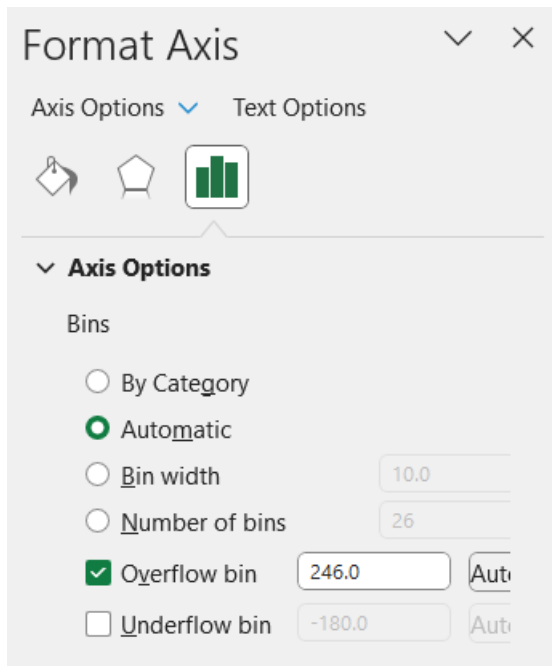


Fig 14

Add labels to the histogram using the + icon on the right side of the graph.

This creates the histogram as seen in Fig 15

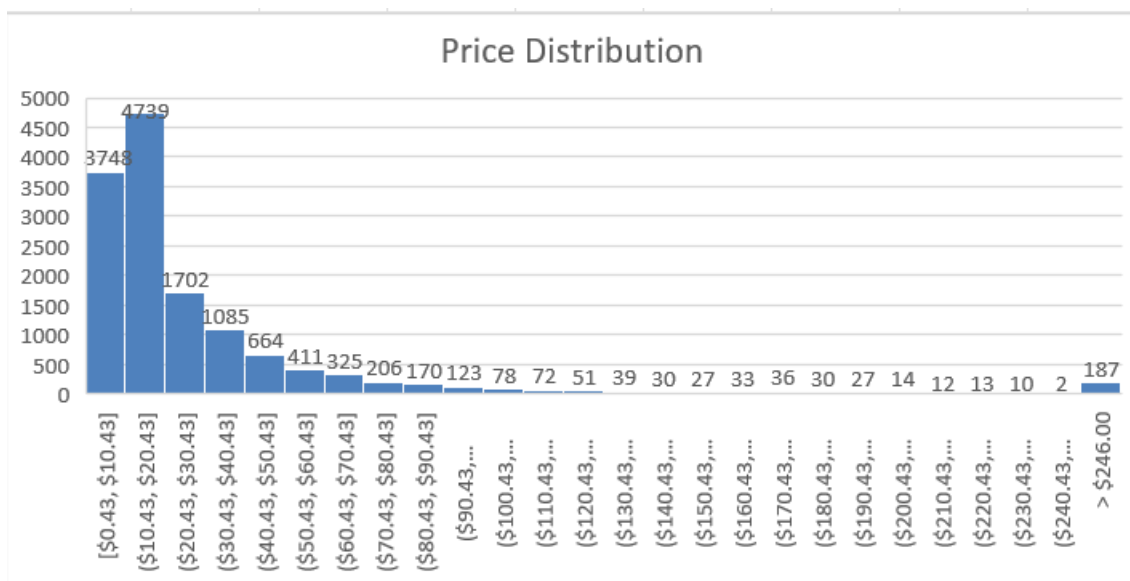


Fig 15

To create a box plot, go to Insert>Charts> Select Insert Statistic Chart and select Box and Whisker, as seen in Fig 12

Uncheck the "Show outlier points" and "Show inner points" from the Series options as seen in Fig 13.

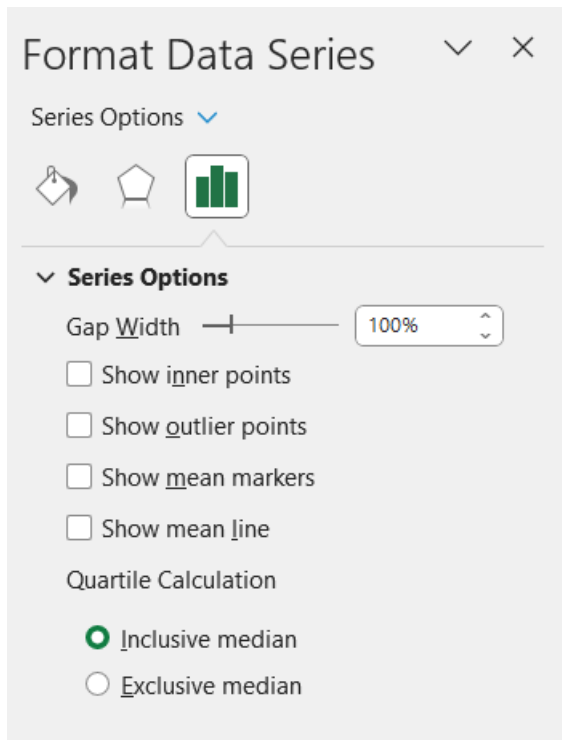


Fig 13

Enable the labels from the + icon on the top right of the graph. We get the box plot as seen in Fig 14.

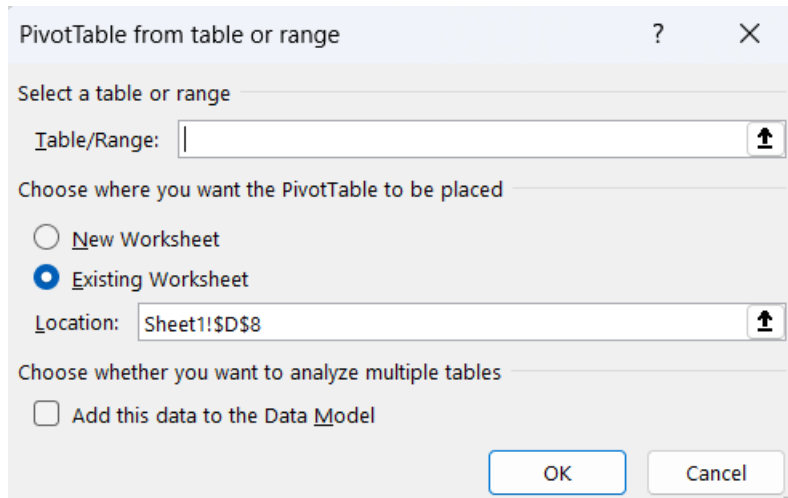


Fig 14

Task 4- Create Pivot Table

In order to create the Pivot Table, we apply a filter on the main data according to the boundaries mentioned i.e. \$9.90-\$32.50. Paste the table to a new sheet.

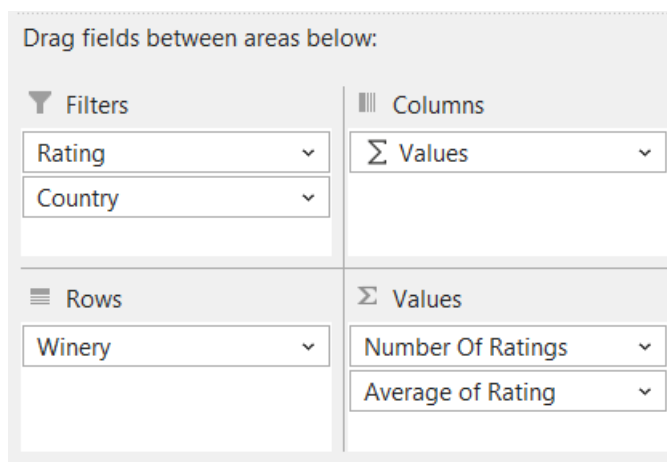
Go to Insert>PivotTable> A new window pops up as seen in Fig 15. Select the entire filtered table from the New Sheet.



The image shows the 'PivotTable from table or range' dialog box in Microsoft Excel. The title bar reads 'PivotTable from table or range' with a question mark and a close button. The dialog is divided into three sections. The first section, 'Select a table or range', has a 'Table/Range:' text box that is currently empty, with an upward-pointing arrow icon to its right. The second section, 'Choose where you want the PivotTable to be placed', contains two radio buttons: 'New Worksheet' (which is unselected) and 'Existing Worksheet' (which is selected). Below these is a 'Location:' text box containing the address 'Sheet1!\$D\$8', also with an upward-pointing arrow icon to its right. The third section, 'Choose whether you want to analyze multiple tables', has a checkbox labeled 'Add this data to the Data Model', which is currently unchecked. At the bottom right of the dialog are two buttons: 'OK' and 'Cancel'.

Fig 15

In the pivot table, select the data as seen in Fig 16.



The image shows the 'PivotTable Fields' task pane in Microsoft Excel. At the top, it says 'Drag fields between areas below:'. The pane is divided into four main areas: 'Filters', 'Columns', 'Rows', and 'Values'. The 'Filters' area on the left contains two dropdown menus: 'Rating' and 'Country'. The 'Columns' area on the right contains one dropdown menu: 'Σ Values'. The 'Rows' area on the left contains one dropdown menu: 'Winery'. The 'Values' area on the right contains two dropdown menus: 'Number Of Ratings' and 'Average of Rating'.

Fig 16

Add a filter of Ratings as >4.0 and we get the pivot table as seen in Fig 17

Rating	(Multiple Items)	
Country	(All)	
Winery	Number Of Ratings	Average of Rating
Markus Molitor	20	4.045
Château Purcari	12	4.15
Schneider	10	4.14
Van Volxem	10	4.04
Terlan (Terlano)	9	4.066666667
Saint Clair	8	4.1375
Von Winning	8	4.1
San Marzano	8	4.325
Morgenster Estate	8	4.0625
Maximin Grünhaus	8	4.1
Herdade dos Grous	8	4.1375
Schola Sarmanti	7	4.257142857
Knipser	7	4.057142857
Nals Margreid	7	4.071428571
Planeta	7	4.085714286
Meerlust	7	4.128571429
Francis Ford Coppola	7	4.085714286
Antinori	7	4.085714286
Cà dei Frati	7	4.114285714
Villa Maria	6	4.1
Rocca di Montegrossi	6	4.016666667
Salentein	6	4.083333333

Conclusion

Part 1 of the report gives an understanding of the data and with the wineries the company must invest in order to maximise their profits.

Part 2 of the report gives the user the steps to perform in order to create the same insights with similar data.