

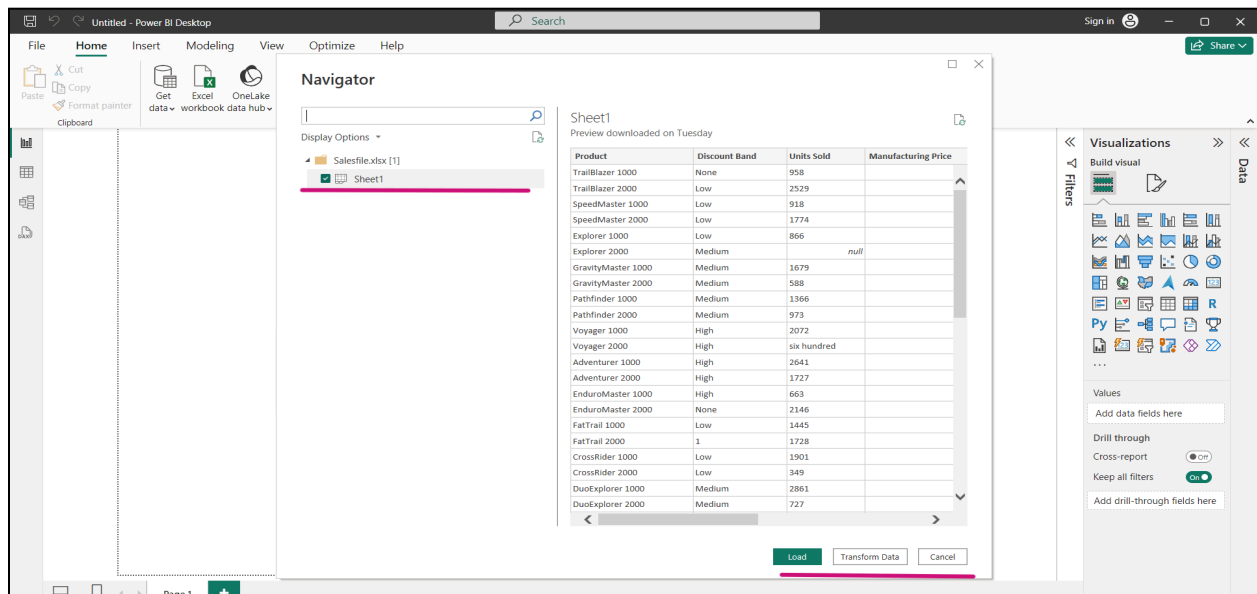
# POWER BI PROJECT

## PART 1: Exercise-Preparing a Dataset

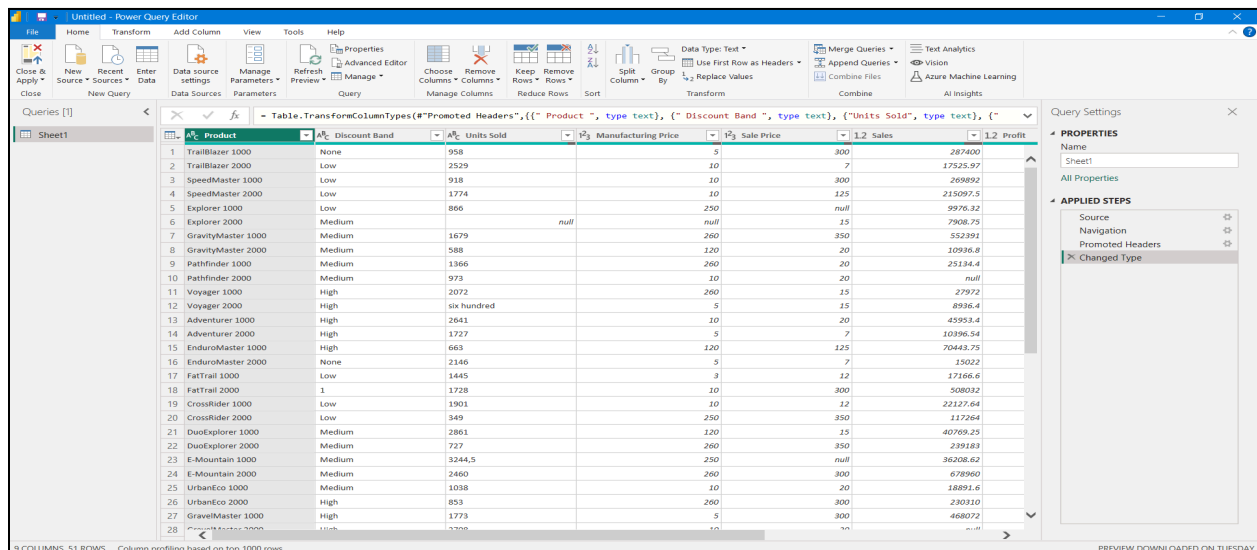
**Question:** Help Adventure Works to resolve these issues in the dataset, by eliminating errors, using Power Query editor so that they can produce an accurate & reliable report.

**Answer:**

**Step-1)** Load the data into Power BI.



**Step-2)** Select Transform Data to open Power Query Editor.



**Step-3) Select the Units Sold column and replace null values. Repeat this task for the Sale Price, Sales, and Profit columns.**

The screenshot shows the Power Query Editor interface. The 'Replace Values' dialog box is open, allowing the user to replace null values in the 'Units Sold' column with the value '0'. The background data table is as follows:

	Product	Discount Band	Units Sold	Manufacturing Price	Sale Price	Sales	Profit
1	Trailblazer 1000	None	958		5	300	287400
2	Trailblazer 2000	Low	2529		10	7	17525.97
3	SpeedMaster 1000	Low					269892
4	SpeedMaster 2000	Low					215097.5
5	Explorer 1000	Low					9976.32
6	Explorer 2000	Medium					7908.75
7	GravityMaster 1000	Medium					552391
8	GravityMaster 2000	Medium					10936.8
9	Pathfinder 1000	Medium					25134.4
10	Pathfinder 2000	Medium					null
11	Voyager 1000	High					27972
12	Voyager 2000	High					8936.4
13	Adventurer 1000	High					45953.4
14	Adventurer 2000	High					10396.54
15	EnduroMaster 1000	High					70443.75
16	EnduroMaster 2000	None					15022
17	FatTrail 1000	Low					17166.6
18	FatTrail 2000	1					508032
19	CrossRider 1000	Low					22127.64
20	CrossRider 2000	Low					117264
21	DuoExplorer 1000	Medium					40769.25
22	DuoExplorer 2000	Medium					239183
23	E-Mountain 1000	Medium					36208.62
24	E-Mountain 2000	Medium					678960
25	UrbanEco 1000	Medium					18891.6
26	UrbanEco 2000	High					230310
27	GravelMaster 1000	High					468072
28	GravelMaster 2000	High					

The screenshot shows the Power Query Editor interface. The 'Replace Values' dialog box is open, allowing the user to replace null values in the 'Sale Price' column with the value '0'. The background data table is the same as in the previous screenshot:

	Product	Discount Band	Units Sold	Manufacturing Price	Sale Price	Sales	Profit
1	Trailblazer 1000	None	958		5	300	287400
2	Trailblazer 2000	Low	2529		10	7	17525.97
3	SpeedMaster 1000	Low					269892
4	SpeedMaster 2000	Low					215097.5
5	Explorer 1000	Low					9976.32
6	Explorer 2000	Medium					7908.75
7	GravityMaster 1000	Medium					552391
8	GravityMaster 2000	Medium					10936.8
9	Pathfinder 1000	Medium					25134.4
10	Pathfinder 2000	Medium					null
11	Voyager 1000	High					27972
12	Voyager 2000	High					8936.4
13	Adventurer 1000	High					45953.4
14	Adventurer 2000	High					10396.54
15	EnduroMaster 1000	High					70443.75
16	EnduroMaster 2000	None					15022
17	FatTrail 1000	Low					17166.6
18	FatTrail 2000	1					508032
19	CrossRider 1000	Low					22127.64
20	CrossRider 2000	Low					117264
21	DuoExplorer 1000	Medium					40769.25
22	DuoExplorer 2000	Medium					239183
23	E-Mountain 1000	Medium					36208.62
24	E-Mountain 2000	Medium					678960
25	UrbanEco 1000	Medium					18891.6
26	UrbanEco 2000	High					230310
27	GravelMaster 1000	High					468072
28	GravelMaster 2000	High					

Power Query Editor interface showing a data table with columns: Product, Discount Band, Units Sold, Manufacturing Price, Sale Price, Sales, Profit. A dialog box titled "Replace Values" is open, showing the "Value To Find" as "null" and "Replace With" as "0". The dialog box is highlighted with a red rectangle.

Query Settings: Properties (Name: Sheet1), Applied Steps (Source, Navigation, Promoted Headers, Changed Type, Replaced Value).

9 COLUMNS, 51 ROWS - Column profiling based on top 1000 rows

PREVIEW DOWNLOADED ON TUESDAY

**Step-4)** Change the data type for **Manufacturing Price** columns to **Decimal Number**. Repeat this task for the **Sales, Sale Price** and **Profit** columns.

Power Query Editor interface showing the same data table. The "Manufacturing Price" column is selected, and the data type dropdown menu is open, showing options like "Decimal Number", "Fixed decimal number", "Whole Number", "Percentage", "Date/Time", "Date", "Time", "Date/Time/Timezone", "Duration", "Text", "True/False", "Binary", and "Using Locale...". The "Decimal Number" option is highlighted with a red rectangle.

Query Settings: Properties (Name: Sheet1), Applied Steps (Source, Navigation, Promoted Headers, Changed Type, Replaced Value, Replaced Value1, Replaced Value2, Replaced Value3).

9 COLUMNS, 51 ROWS - Column profiling based on top 1000 rows

PREVIEW DOWNLOADED ON TUESDAY

**Step-5)** Select the **Discount Band** column and replace **1** with **None**. Also, change the data type to **Text**.

Replace Values

Replace one value with another in the selected columns.

Value To Find: 1

Replace With: None

Advanced options

OK Cancel

Data Type: Text

1.2 Decimal Number

\$ Fixed decimal number

% Whole Number

% Percentage

Date/Time

Date

Time

Date/Time/Timezone

Duration

Text

True/False

Binary

Using Locale...

**Step-6)** Select the **Units Sold** column, replace **six hundred** with **600** and then change the column's data type to **Whole Number**.

The screenshot shows the Power Query Editor interface. A dialog box titled "Replace Values" is open, allowing the user to replace one value with another in the selected columns. The "Value To Find" field contains "six hundred" and the "Replace With" field contains "600". The background table has columns: Discount Band, Units Sold, Manufacturing Price, Sale Price, Sales, and Profit. The "Units Sold" column is highlighted.

	Discount Band	Units Sold	Manufacturing Price	Sale Price	Sales	Profit
1	None	958	5	300	287400	47900
2	Low	2529	10	7	17525.97	4880.97
3	Low	2529	10	7	17525.97	4880.97
4	Low	2529	10	7	17525.97	4880.97
5	Low	2529	10	7	17525.97	4880.97
6	Medium	2529	10	7	17525.97	4880.97
7	Medium	2529	10	7	17525.97	4880.97
8	Medium	2529	10	7	17525.97	4880.97
9	Medium	2529	10	7	17525.97	4880.97
10	Medium	2529	10	7	17525.97	4880.97
11	High	2529	10	7	17525.97	4880.97
12	High	2529	10	7	17525.97	4880.97
13	High	2529	10	7	17525.97	4880.97
14	High	2529	10	7	17525.97	4880.97
15	High	2529	10	7	17525.97	4880.97
16	None	2529	10	7	17525.97	4880.97
17	Low	2529	10	7	17525.97	4880.97
18	None	1728	10	300	508032	76032
19	Low	1901	10	12	22127.64	16424.64
20	Low	349	250	350	117264	26524
21	Medium	2861	120	15	40769.25	12159.25
22	Medium	727	260	350	239183	50163
23	Medium	3244.5	250	0	36208.62	26475.12
24	Medium	2460	260	300	678960	63960
25	Medium	1038	10	20	18891.6	8511.6
26	High	853	260	300	230310	17060
27	High	1773	5	300	468072	24822
28	High	1773	5	300	468072	24822

The screenshot shows the Power Query Editor interface. The "Units Sold" column is selected, and the data type dropdown menu is open, showing various options. The "Whole Number" option is selected. The background table is the same as the previous screenshot.

	Discount Band	Units Sold	Manufacturing Price	Sale Price	Sales	Profit
1	None	958	5	300	287400	47900
2	Low	2529	10	7	17525.97	4880.97
3	Low	2529	10	300	269892	40392
4	Low	2529	10	125	215097.5	2217.5
5	Low	2529	250	0	9976.32	7378.32
6	Medium	2529	null	15	7908.75	2358.75
7	Medium	2529	260	350	552391	115851
8	Medium	2529	120	20	10936.8	5056.8
9	Medium	2529	260	20	25134.4	11474.4
10	Medium	2529	10	20	0	7978.6
11	High	2529	260	15	27972	7252
12	High	2529	5	15	8936.4	2166.4
13	High	2529	10	20	45953.4	19543.4
14	High	2529	5	7	10396.54	1761.54
15	High	663	120	125	70443.75	-9116.25
16	None	2146	5	7	15022	0
17	Low	1445	3	12	17166.6	12831.6
18	None	1728	10	300	508032	76032
19	Low	1901	10	12	22127.64	16424.64
20	Low	349	250	350	117264	26524
21	Medium	2861	120	15	40769.25	12159.25
22	Medium	727	260	350	239183	50163
23	Medium	3244.5	250	0	36208.62	26475.12
24	Medium	2460	260	300	678960	63960
25	Medium	1038	10	20	18891.6	8511.6
26	High	853	260	300	230310	17060
27	High	1773	5	300	468072	24822
28	High	1773	5	300	468072	24822

**Step-7)** Select the **Date** column and replace all null values with **March 03 2023** and change the data type.

Replace Values

Replace one value with another in the selected columns.

Value To Find  
null

Replace With  
March 03 2023

OK Cancel

Query Settings

PROPERTIES

Name  
Sheet1

APPLIED STEPS

- Source
- Navigation
- Promoted Headers
- Changed Type
- Replaced Value
- Replaced Value1
- Replaced Value2
- Replaced Value3
- Changed Type1
- Replaced Value4
- Changed Type2
- Replaced Value5
- Changed Type3

Table.ReplaceValue(#"Changed Type3",null,#date(2023, 3, 3),Replacer.ReplaceValue,{"Date"})

Query Settings

PROPERTIES

Name  
Sheet1

APPLIED STEPS

- Source
- Navigation
- Promoted Headers
- Changed Type
- Replaced Value
- Replaced Value1
- Replaced Value2
- Replaced Value3
- Changed Type1
- Replaced Value4
- Changed Type2
- Replaced Value5
- Changed Type3
- Replaced Value6

**Step-8)** Select the **Manufacturing Price** column and Remove Errors. Also remove the Duplicate Rows.

The screenshot shows the Power Query Editor interface. The 'Manufacturing Price' column is selected, and a context menu is open with 'Remove Errors' highlighted. The 'Applied Steps' pane on the right shows 'Filtered Rows2' as the current step.

Product	Discount Band	Units Sold	1.2 Manufacturing Price	1.2 Sale Price	1.2 Sales	1.2 Profit
Trailblazer 1000	None	958	5	300	287400	
Trailblazer 2000	Low	2529	10	7	17525.97	
SpeedMaster 1000	Low	918	10	300	269892	
SpeedMaster 2000	Low	1774	10	125	215097.5	
Explorer 1000	Low	866	250	0	9976.32	
GravityMaster 1000	Medium	1679	260	350	552391	
GravityMaster 2000	Medium	588	120	20	10936.8	
Pathfinder 1000	Medium	1366	260	20	25134.4	
Pathfinder 2000	Medium	973	10	20	0	
Voyager 1000	High	2072	260	15	27972	
Voyager 2000	High	600	5	15	8936.4	
Adventurer 1000	High	2641	10	20	45953.4	
Adventurer 2000	High	1727	5	7	10396.54	
EnduroMaster 1000	High	663	120	125	70443.75	
EnduroMaster 2000	High	2146	5	7	15022	
FatTrail 1000	Low	1445	3	12	17166.6	
FatTrail 2000	None	1728	10	300	508032	
CrossRider 1000	Low	1901	10	12	22127.64	
CrossRider 2000	Low	349	250	350	117264	
DuoExplorer 1000	Medium	2861	120	15	40769.25	
DuoExplorer 2000	Medium	727	260	350	239183	
E-Mountain 1000	Medium	32445	250	0	36208.62	
E-Mountain 2000	Medium	2460	260	300	678960	
UrbanEco 1000	Medium	1038	10	20	18891.6	
UrbanEco 2000	High	853	260	300	230310	
GravelMaster 1000	High	1773	5	300	468072	
GravelMaster 2000	High	2708	10	20	0	

**Step-9)** Select the **Close & Apply** button.

The screenshot shows the Power Query Editor interface. The 'Close & Apply' button is highlighted in the top-left corner. The 'Applied Steps' pane on the right shows 'Removed Duplicates' as the current step.

Product	Discount Band	Units Sold	1.2 Manufacturing Price	1.2 Sale Price	1.2 Sales	1.2 Profit
Trailblazer 1000	None	958	5	300	287400	
Trailblazer 2000	Low	2529	10	7	17525.97	
SpeedMaster 1000	Low	918	10	300	269892	
SpeedMaster 2000	Low	1774	10	125	215097.5	
Explorer 1000	Low	866	250	0	9976.32	
GravityMaster 1000	Medium	1679	260	350	552391	
GravityMaster 2000	Medium	588	120	20	10936.8	
Pathfinder 1000	Medium	1366	260	20	25134.4	
Pathfinder 2000	Medium	973	10	20	0	
Voyager 1000	High	2072	260	15	27972	
Voyager 2000	High	600	5	15	8936.4	
Adventurer 1000	High	2641	10	20	45953.4	
Adventurer 2000	High	1727	5	7	10396.54	
EnduroMaster 1000	High	663	120	125	70443.75	
EnduroMaster 2000	None	2146	5	7	15022	
FatTrail 1000	Low	1445	3	12	17166.6	
FatTrail 2000	None	1728	10	300	508032	
CrossRider 1000	Low	1901	10	12	22127.64	
CrossRider 2000	Low	349	250	350	117264	
DuoExplorer 1000	Medium	2861	120	15	40769.25	
DuoExplorer 2000	Medium	727	260	350	239183	
E-Mountain 1000	Medium	32445	250	0	36208.62	
E-Mountain 2000	Medium	2460	260	300	678960	
UrbanEco 1000	Medium	1038	10	20	18891.6	
UrbanEco 2000	High	853	260	300	230310	
GravelMaster 1000	High	1773	5	300	468072	
GravelMaster 2000	High	2708	10	20	0	

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File Home Help Table tools

Name Sheet1

Structure

Mark as date table  
Calendars

Manage relationships  
Relationships

New Quick New New  
measure measure column  
Calculations

Product Discount Band Units Sold Manufacturing Price Sale Price Sales Profit Date Month Number

TrailBlazer 1000	None	958	5	300	287400	47900	August 1, 2014	8
TrailBlazer 2000	Low	2529	10	7	17525.97	4880.97	July 1, 2014	7
SpeedMaster 1000	Low	918	10	300	269892	40392	May 1, 2014	5
SpeedMaster 2000	Low	1774	10	125	215097.5	2217.5	March 1, 2014	3
Explorer 1000	Low	866	250	0	9976.32	7378.32	May 1, 2014	5
GravityMaster 1000	Medium	1679	260	350	552391	115851	September 1, 2014	9
GravityMaster 2000	Medium	588	120	20	10936.8	5056.8	December 1, 2013	12
Pathfinder 1000	Medium	1366	260	20	25134.4	11474.4	June 1, 2014	6
Pathfinder 2000	Medium	973	10	20	0	7978.6	March 1, 2014	3
Voyager 1000	High	2072	260	15	27972	7252	December 1, 2014	12
Voyager 2000	High	600	5	15	8936.4	2166.4	March 1, 2014	3
Adventurer 1000	High	2641	10	20	45953.4	19543.4	February 1, 2014	2
Adventurer 2000	High	1727	5	7	10396.54	1761.54	October 1, 2013	10
EnduroMaster 1000	High	663	120	125	70443.75	-9116.25	September 1, 2014	9
EnduroMaster 2000	None	2146	5	7	15022	0	September 1, 2014	9
FatTrail 1000	Low	1445	3	12	17166.6	12831.6	September 1, 2014	9
FatTrail 2000	None	1728	10	300	508032	76032	March 3, 2023	5
CrossRider 1000	Low	1901	10	12	22127.64	16424.64	June 1, 2014	6
CrossRider 2000	Low	349	250	350	117264	26524	September 1, 2013	9
DuoExplorer 1000	Medium	2861	120	15	40769.25	12159.25	January 1, 2014	1
DuoExplorer 2000	Medium	727	260	350	239183	50163	October 1, 2013	10
E-Mountain 1000	Medium	32445	250	0	36208.62	26475.12	January 1, 2014	1
E-Mountain 2000	Medium	2460	260	300	678960	63960	September 1, 2014	9
UrbanEco 1000	Medium	1038	10	20	18891.6	8511.6	June 1, 2014	6
UrbanEco 2000	High	853	260	300	230310	17060	December 1, 2014	12
GravelMaster 1000	High	1773	5	300	468072	24822	April 1, 2014	4
GravelMaster 2000	High	2708	10	20	0	20039.2	February 1, 2014	2
FoldAway 1000	Low	2861	120	20	22127.64	7978.6	October 1, 2013	10

Table: Sheet1 (40 rows)

Data

Search

Sheet1

Table View

**Step-10) Save the File.**

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File Home Insert Modeling View Optimize Help

Get Excel OneLake SQL Server Enter data Datasource Recent sources Transform Refresh data Queries New visual Text box More visuals Insert New Quick measure measure Calculations Sensitivity Sensitivity Publish Copilot

Build visual

Select or drag fields from the data model

Save this file

Name \*  
PROJECT-EXERCISE-PREPARING A DATASET.pbix

Recent locations  
NCPL

More options...

Save Cancel

Visualizations

Build visual

Filters

Sheet1

Σ Sales  
Σ Discount Band  
Σ Manufacturing ...  
Σ Product  
Σ Profit  
Σ Sale Price  
Σ Date  
Σ Month Number  
Σ Units Sold

Values  
Add data fields here

Drill through  
Cross-report  
Keep all filters  
Add drill-through fields here

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Page 1

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