In [4]:
```
import pandas as pd
import numpy as np
from matplotlib import pyplot as plt
import missingno as msno
import seaborn as sns
```

In [6]:
```
data = pd.read_csv("file:///C:/Users/Vasu%20Prasad/OneDrive/Documents/MCA/Internships/Unified%20Mentors%20Int
data
```

Out[6]:

	Region	Country	Item Type	Sales Channel	Order Priority	Order Date	Order ID	Ship Date	Units Sold	Unit Price	Unit Cost	Total Revenue	Total C
0	Australia and Oceania	Tuvalu	Baby Food	Offline	H	5/28/2010	669165933	6/27/2010	9925	255.28	159.42	2533654.00	158224
1	Central America and the Caribbean	Grenada	Cereal	Online	C	8/22/2012	963881480	9/15/2012	2804	205.70	117.11	576782.80	32837
2	Europe	Russia	Office Supplies	Offline	L	05-02-2014	341417157	05-08-2014	1779	651.21	524.96	1158502.59	93390
3	Sub-Saharan Africa	Sao Tome and Principe	Fruits	Online	C	6/20/2014	514321792	07-05-2014	8102	9.33	6.92	75591.66	5606
4	Sub-Saharan Africa	Rwanda	Office Supplies	Offline	L	02-01-2013	115456712	02-06-2013	5062	651.21	524.96	3296425.02	265734
...	...	...	...	...	...	...	...	...	...	...	...	...	
95	Sub-Saharan Africa	Mali	Clothes	Online	M	7/26/2011	512878119	09-03-2011	888	109.28	35.84	97040.64	3182
96	Asia	Malaysia	Fruits	Offline	L	11-11-2011	810711038	12/28/2011	6267	9.33	6.92	58471.11	4336
97	Sub-Saharan Africa	Sierra Leone	Vegetables	Offline	C	06-01-2016	728815257	6/29/2016	1485	154.06	90.93	228779.10	13503
98	North America	Mexico	Personal Care	Offline	M	7/30/2015	559427106	08-08-2015	5767	81.73	56.67	471336.91	32681
99	Sub-Saharan Africa	Mozambique	Household	Offline	L	02-10-2012	665095412	2/15/2012	5367	668.27	502.54	3586605.09	269713

100 rows × 14 columns

In [7]:
```
pd.concat([data.head(),data.tail()])
```

Out[7]:

	Region	Country	Item Type	Sales Channel	Order Priority	Order Date	Order ID	Ship Date	Units Sold	Unit Price	Unit Cost	Total Revenue	Total C
0	Australia and Oceania	Tuvalu	Baby Food	Offline	H	5/28/2010	669165933	6/27/2010	9925	255.28	159.42	2533654.00	158224
1	Central America and the Caribbean	Grenada	Cereal	Online	C	8/22/2012	963881480	9/15/2012	2804	205.70	117.11	576782.80	32837
2	Europe	Russia	Office Supplies	Offline	L	05-02-2014	341417157	05-08-2014	1779	651.21	524.96	1158502.59	93390
3	Sub-Saharan Africa	Sao Tome and Principe	Fruits	Online	C	6/20/2014	514321792	07-05-2014	8102	9.33	6.92	75591.66	5606
4	Sub-Saharan Africa	Rwanda	Office Supplies	Offline	L	02-01-2013	115456712	02-06-2013	5062	651.21	524.96	3296425.02	26573
95	Sub-Saharan Africa	Mali	Clothes	Online	M	7/26/2011	512878119	09-03-2011	888	109.28	35.84	97040.64	3182
96	Asia	Malaysia	Fruits	Offline	L	11-11-2011	810711038	12/28/2011	6267	9.33	6.92	58471.11	4336
97	Sub-Saharan Africa	Sierra Leone	Vegetables	Offline	C	06-01-2016	728815257	6/29/2016	1485	154.06	90.93	228779.10	13503
98	North America	Mexico	Personal Care	Offline	M	7/30/2015	559427106	08-08-2015	5767	81.73	56.67	471336.91	32681
99	Sub-Saharan Africa	Mozambique	Household	Offline	L	02-10-2012	665095412	2/15/2012	5367	668.27	502.54	3586605.09	26971

In [8]:
```
data.describe()
```

Out[8]:

	Order ID	Units Sold	Unit Price	Unit Cost	Total Revenue	Total Cost	Total Profit
count	1.000000e+02	100.000000	100.000000	100.000000	1.000000e+02	1.000000e+02	1.000000e+02
mean	5.550204e+08	5128.710000	276.761300	191.048000	1.373488e+06	9.318057e+05	4.416820e+05
std	2.606153e+08	2794.484562	235.592241	188.208181	1.460029e+06	1.083938e+06	4.385379e+05
min	1.146066e+08	124.000000	9.330000	6.920000	4.870260e+03	3.612240e+03	1.258020e+03
25%	3.389225e+08	2836.250000	81.730000	35.840000	2.687212e+05	1.688680e+05	1.214436e+05
50%	5.577086e+08	5382.500000	179.880000	107.275000	7.523144e+05	3.635664e+05	2.907680e+05
75%	7.907551e+08	7369.000000	437.200000	263.330000	2.212045e+06	1.613870e+06	6.358288e+05
max	9.940222e+08	9925.000000	668.270000	524.960000	5.997055e+06	4.509794e+06	1.719922e+06

In [9]:
```
data.columns
```

Out[9]:
```
Index(['Region', 'Country', 'Item Type', 'Sales Channel', 'Order Priority',
       'Order Date', 'Order ID', 'Ship Date', 'Units Sold', 'Unit Price',
       'Unit Cost', 'Total Revenue', 'Total Cost', 'Total Profit'],
      dtype='object')
```

In [10]:
```
data.size
```

Out[10]:
```
1400
```

In [11]:
```
data.shape
```

Out[11]:
```
(100, 14)
```

In [12]:
```
data.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 100 entries, 0 to 99
Data columns (total 14 columns):
 #   Column          Non-Null Count  Dtype  
---  ------          --------------  -----  
 0   Region          100 non-null    object 
 1   Country         100 non-null    object 
 2   Item Type       100 non-null    object 
 3   Sales Channel   100 non-null    object 
 4   Order Priority  100 non-null    object 
 5   Order Date      100 non-null    object 
 6   Order ID        100 non-null    int64  
 7   Ship Date       100 non-null    object 
 8   Units Sold      100 non-null    int64  
 9   Unit Price      100 non-null    float64
 10  Unit Cost       100 non-null    float64
 11  Total Revenue   100 non-null    float64
 12  Total Cost      100 non-null    float64
 13  Total Profit    100 non-null    float64
dtypes: float64(5), int64(2), object(7)
memory usage: 11.1+ KB
```

In [13]:
```
data.dtypes
```

Out[13]:
```
Region             object
Country            object
Item Type          object
Sales Channel      object
Order Priority     object
Order Date         object
Order ID            int64
Ship Date          object
Units Sold          int64
Unit Price        float64
Unit Cost         float64
Total Revenue     float64
Total Cost        float64
Total Profit      float64
dtype: object
```

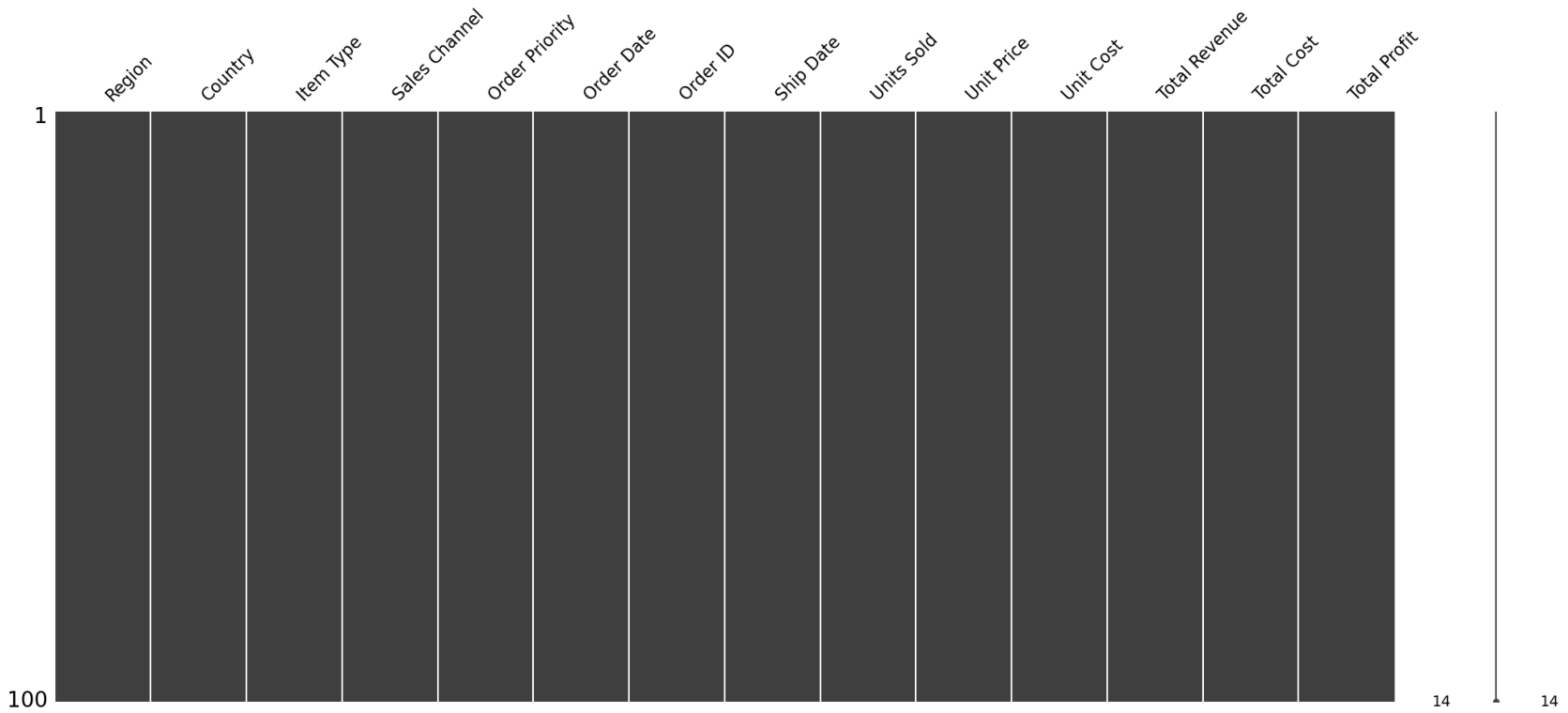
In [14]:
```
data.isnull().sum().reset_index().rename(columns = {0:'Count'})
```

Out[14]:

	index	Count
0	Region	0
1	Country	0
2	Item Type	0
3	Sales Channel	0
4	Order Priority	0
5	Order Date	0
6	Order ID	0
7	Ship Date	0
8	Units Sold	0
9	Unit Price	0
10	Unit Cost	0
11	Total Revenue	0
12	Total Cost	0
13	Total Profit	0

In [19]:
```
msno.matrix(data)
```

Out[19]: <Axes: >



In [15]:
```
data[["Country"]].groupby(by  = ["Country"]).count().reset_index()
```

Out[15]:

	Country
0	Albania
1	Angola
2	Australia
3	Austria
4	Azerbaijan
...	...
71	The Gambia
72	Turkmenistan
73	Tuvalu
74	United Kingdom
75	Zambia

76 rows × 1 columns

In [28]:
```
data.nunique().reset_index().rename(columns = {0:"Count"})
```

Out[28]:

	index	Count
0	Region	7
1	Country	76
2	Item Type	12
3	Sales Channel	2
4	Order Priority	4
5	Order Date	100
6	Order ID	100
7	Ship Date	99
8	Units Sold	99
9	Unit Price	12
10	Unit Cost	12
11	Total Revenue	100
12	Total Cost	100
13	Total Profit	100

In [ ]:

In [ ]:

In [ ]:

In [ ]:

In [ ]: