In [1]:
```
greetings = "Assalam-o-Alaikum!"
print(greetings)
```

```
Assalam-o-Alaikum!
```

Import Libraries

In [2]:
```
import pandas as pd
```

Data

In [5]:
```
crockery_items = ["Cup", "Bottle", "Plate", "Hotpot", "Glass", "Knife", "Spoon"]
prices = [50, 60, 30, 100, 70, 30, 40]
last_month_items_sold = [10, 15, 12, 2, 27, 12, 11]
```

In [6]:
```
df = pd.DataFrame({"Crockery Items": crockery_items,
                   "Prices": prices,
                   "Last Month Items Sold": last_month_items_sold})
df
```

Out[6]:

	Crockery Items	Prices	Last Month Items Sold
0	Cup	50	10
1	Bottle	60	15
2	Plate	30	12
3	Hotpot	100	2
4	Glass	70	27
5	Knife	30	12
6	Spoon	40	11

Total Sales By Crockery Items On The End Of Month

In [7]:
```
df["Total Sales"] = df["Prices"] * df["Last Month Items Sold"]
df
```

Out[7]:

	Crockery Items	Prices	Last Month Items Sold	Total Sales
0	Cup	50	10	500
1	Bottle	60	15	900
2	Plate	30	12	360
3	Hotpot	100	2	200
4	Glass	70	27	1890
5	Knife	30	12	360
6	Spoon	40	11	440

Making Quality By Items Prices

In [8]:
```
def quality(x):
    if x >= 0 and x < 50:
        return "Normal"
    elif x >=50 and x < 70:
        return "High"
    else:
        return("Premium")
```

In [11]:
```
df["Quality"] = df["Prices"].apply(quality)
df
```

Out[11]:

	Crockery Items	Prices	Last Month Items Sold	Total Sales	Quality
0	Cup	50	10	500	High
1	Bottle	60	15	900	High
2	Plate	30	12	360	Normal
3	Hotpot	100	2	200	Premium
4	Glass	70	27	1890	Premium
5	Knife	30	12	360	Normal
6	Spoon	40	11	440	Normal

Costly Item In The List

In [12]:
```
costly_item = df[df["Prices"] == df["Prices"].max()]
costly_item
```

Out[12]:

	Crockery Items	Prices	Last Month Items Sold	Total Sales	Quality
3	Hotpot	100	2	200	Premium

Cheapest Items In The List

In [14]:
```
cheapest_items = df[df["Prices"] == df["Prices"].min()]
cheapest_items
```

Out[14]:

	Crockery Items	Prices	Last Month Items Sold	Total Sales	Quality
2	Plate	30	12	360	Normal
5	Knife	30	12	360	Normal

Most Sold Out Item

In [16]:
```
msi = df[df["Last Month Items Sold"] == df["Last Month Items Sold"].max()]
msi
```

Out[16]:

	Crockery Items	Prices	Last Month Items Sold	Total Sales	Quality
4	Glass	70	27	1890	Premium

Least Sold Out Item

In [17]:
```
lsi = df[df["Last Month Items Sold"] == df["Last Month Items Sold"].min()]
lsi
```

Out[17]:

	Crockery Items	Prices	Last Month Items Sold	Total Sales	Quality
3	Hotpot	100	2	200	Premium

Higest Sale From Items

In [18]:
```
hsfi = df[df["Total Sales"] == df["Total Sales"].max()]
hsfi
```

Out[18]:

	Crockery Items	Prices	Last Month Items Sold	Total Sales	Quality
4	Glass	70	27	1890	Premium

Lowest Sale From Items

In [19]:
```
lsfi = df[df["Total Sales"] == df["Total Sales"].min()]
lsfi
```

Out[19]:

	Crockery Items	Prices	Last Month Items Sold	Total Sales	Quality
3	Hotpot	100	2	200	Premium

Average Price Of Items

In [24]:
```
AvgPOI = df["Prices"].mean()
print("Average Price Of Items = $" + str(int(AvgPOI)))
```

```
Average Price Of Items = $54
```

Average Items Sold In A Month

In [25]:
```
AvgSI = df["Last Month Items Sold"].mean()
print("Average Items Sold In A Month = $" + str(int(AvgSI)))
```

```
Average Items Sold In A Month = $12
```

Average Sales In A Month

In [27]:
```
AvgSIM = df["Total Sales"].mean()
print("Average Sales In A Month = $" + str(int(AvgSIM)))
```

```
Average Sales In A Month = $664
```

Total Prices Of Items

In [29]:
```
TPI = df["Prices"].sum()
print("Total Prices Of Items = $" + str(TPI))
```

```
Total Prices Of Items = $380
```

Total Last Month Items Sold

In [37]:
```
TLMIS = df["Last Month Items Sold"].sum()
print("Total Last Month Items Sold =", str(TLMIS))
```

```
Total Last Month Items Sold = 89
```

Total Income Of Last Month

In [36]:
```
TILM = df["Total Sales"].sum()
print("Total Income Of Last Month = $" + str(TILM))
```

```
Total Income Of Last Month = $4650
```