Part 1

In [1]:

```python
# 1) Import the libraries that we will need
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

In [2]:

```python
# 2) Load the data file into a new Pandas data frame called `product_sales_df` by calling
product_sales_df = pd.read_csv('"D:\abu\statsfinal.csv")
```

In [3]:

```python
# 3) Display the size of this data frame using the `shape` data member of `product_sales_
product_sales_df.shape
```

Out[3]:

```
(4600, 10)
```

In [4]:

```python
## 3') display the column names using the `columns` data member
product_sales_df.columns
```

Out[4]:

```
Index(['Unnamed: 0', 'Date', 'Q-P1', 'Q-P2', 'Q-P3', 'Q-P4', 'S-P1', 'S-P
2',
       'S-P3', 'S-P4'],
      dtype='object')
```

In [5]:

```
# 4) Display the first 10 rows of this data frame by calling the `head` method with `prod
product_sales_df.head(10)
```

Out[5]:

	Unnamed: 0	Date	Q-P1	Q-P2	Q-P3	Q-P4	S-P1	S-P2	S-P3	S-P4
0	0	13-06-2010	5422	3725	576	907	17187.74	23616.50	3121.92	6466.91
1	1	14-06-2010	7047	779	3578	1574	22338.99	4938.86	19392.76	11222.62
2	2	15-06-2010	1572	2082	595	1145	4983.24	13199.88	3224.90	8163.85
3	3	16-06-2010	5657	2399	3140	1672	17932.69	15209.66	17018.80	11921.36
4	4	17-06-2010	3668	3207	2184	708	11627.56	20332.38	11837.28	5048.04
5	5	18-06-2010	2898	2539	311	1513	9186.66	16097.26	1685.62	10787.69
6	6	19-06-2010	6912	1470	1576	1608	21911.04	9319.80	8541.92	11465.04
7	7	20-06-2010	5209	2550	3415	842	16512.53	16167.00	18509.30	6003.46
8	8	21-06-2010	6322	852	3646	1377	20040.74	5401.68	19761.32	9818.01
9	9	22-06-2010	6865	414	3902	562	21762.05	2624.76	21148.84	4007.06

In [6]:

```
# 5) Display the data types of the data frame columns using the `dtypes` data member of `
product_sales_df.dtypes
```

Out[6]:

```
Unnamed: 0      int64
Date           object
Q-P1            int64
Q-P2            int64
Q-P3            int64
Q-P4            int64
S-P1          float64
S-P2          float64
S-P3          float64
S-P4          float64
dtype: object
```