

## EXPERIMENT-7

Aim: To execute pandas program to create a pivot table and find the maximum and minimum sale value of the items (refer sales-data table).

### Pseudocode:

- 1) Import necessary library (pandas)
- 2) Load the sales data into a Pandas DataFrame
- 3) Create a pivot table using the pivot-table() function to summarize sales data by item, finding the maximum and minimum sales data by item.
- 4) Extract the maximum and minimum sales values from table
- 5) Display the results.

### Sample input:

Sales-data table.

### Sample output:

Item	max sale_value	min sale_value
A	200	120
B	150	130
C	180	175

### Result:

Therefore the pandas program for maximum sales value and minimum sales value executed successfully.

The screenshot displays a Google Colab notebook with the following content:

```
[ ] # Create pivot table to find max and min sales values
pivot_table = df.pivot_table(values='Sale_Value', index='Item', aggfunc=['max', 'min'])

# Display the pivot table
print(pivot_table)
```

The output of the code is a pivot table:

	max	min
	Sale_Value	Sale_Value
Item		
A	200	120
B	150	130
C	180	175

Below the pivot table, the code for creating the sample data is shown:

```
[ ] import pandas as pd

# Sample data for sales_data (for demonstration)
data = {
    'Item': ['A', 'B', 'A', 'C', 'B', 'A', 'C'],
    'Units_Sold': [10, 15, 20, 30, 25, 5, 40],
    'Date': ['2024-11-01', '2024-11-01', '2024-11-02', '2024-11-02', '2024-11-03', '2024-11-03', '2024-11-04']
}
```

The bottom status bar indicates that the execution is completed at 09:49.