

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:

- ± import necessary library (pandas)
- ± load the sales data into a Pandas DataFrame
- ± create a pivot table using the pivot-table() function to summarize sales data by item, finding the maximum and minimum sales data
- ± Extract the maximum and minimum sales value from table
- ± 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

```

import pandas as pd

# Load the sales data
sales_data = pd.read_csv("C:/Users/abhip/OneDrive/Documents/DSA05 LAB/sales.csv")

# Create a Pivot table to find the maximum and minimum sales for each item
pivot_table = sales_data.pivot_table(values='Sales', index='Item', aggfunc=['max', 'min'])

# Rename the columns for clarity
pivot_table.columns = ['Max Sales', 'Min Sales']

# Display the Pivot table
print("Pivot Table showing Maximum and Minimum Sales for each item:")
print(pivot_table)

```

IDLE Shell 3.12.4

File Edit Shell Debug Options Window Help

Python 3.12.4 (tags/v3.12.4:8e8a4ba, Jun 6 2024, 19:30:16) [MSC v.1940 64 bit (AMD64)] on win32

Type "help", "copyright", "credits" or "license()" for more information.

>>>

===== RESTART: C:/Users/abhip/OneDrive/Documents/DSA05 LAB/program 5.py =====

===== RESTART: C:/Users/abhip/OneDrive/Documents/DSA05 LAB/program 6.py =====

===== RESTART: C:/Users/abhip/OneDrive/Documents/DSA05 LAB/program 7.py =====

Pivot Table showing Maximum and Minimum Sales for each item:

Item	Max Sales	Min Sales
Item_A	500	200
Item_B	450	300
Item_C	500	300

>>>