Assignment NO.4

# Name: Om chakunde

import pandas as pd

# Read the CSV file into a DataFrame

df = pd.read\_csv('/content/grainsales.csv')

# Display the DataFrame print(df)

# Rollno:402[D1] PRN:202201040068

**OUTPUT:**

GrainName

1. Ragi
2. Bajra
3. Ragi
4. Bajra
5. Ragi
6. Bajra
7. Oats
8. Sattu
9. Sooji
10. Brown rice
11. Wheat
12. Corn
13. Ragi
14. Bajra
15. Oats
16. Sattu
17. Sooji
18. Brown rice
19. Wheat
20. Corn
21. Sooji
22. Brown rice
23. Wheat
24. Corn
25. Ragi
26. Brown rice

State Maharashtra

Panjab Maharashtra

Panjab Maharashtra

Panjab Hariyana Gujarat Tamil Nadu Telangana West Bengol

UP

Maharashtra

Panjab Hariyana Gujarat Tamil Nadu Telangana West Bengol

UP

Tamil Nadu Telangana West Bengol

UP

Maharashtra Telangana

City Months Nagpur

Amritsar Nagpur Amritsar Nagpur Amritsar Gurugram

Surat

Madurai Hyderabad Asansole Kanpur Nagpur Amritsar Gurugram

Surat Madurai Hyderabad Asansole Kanpur Madurai Hyderabad Asansole Kanpur Nagpur Hyderabad

JAN FEB JAN FEB JAN FEB MARCH APRIL

MAY JUNE JULY AUG JAN FEB MARCH APRIL

MAY JUNE JULY AUG MAY JUNE JULY AUG JAN JUNE

Year Sales 2023 1000000

2023 1500000

2023 1000000

2023 1500000

2023 1000000

2023 1500000

2023 2000000

2023 2500000

2023 3000000

2023 3500000

2023 4000000

2023 4500000

2023 1000000

2023 1500000

2023 2000000

2023 2500000

2023 3000000

2023 3500000

2023 4000000

2023 4500000

2023 3000000

2023 3500000

2023 4000000

2023 4500000

2023 1000000

2023 3500000

# Identify 10 grains from the dataset grains = df['GrainName'].unique()[:10] print(grains)

# OUTPUT:

['Ragi' 'Bajra' 'Oats' 'Sattu ' 'Sooji' 'Brown rice ' 'Wheat' 'Corn']

# Group data by month and calculate total sales

monthly\_sales = df.groupby('Months')['Sales'].sum()

# The month with the highest sales best\_month = monthly\_sales.idxmax()

# Get the earnings for the best month earnings = monthly\_sales.loc[best\_month]

print("Best month for sales:", best\_month) print("Earnings for the best month:", earnings)

# OUTPUT:

Best month for sales: JULY

Earnings for the best month: 16000000

# Group data by product and calculate total sales product\_sales = df.groupby('GrainName')['Sales'].sum()

# The product with the highest sales best\_product = product\_sales.idxmax()

print("Product that sold the most:", best\_product)

# OUTPUT:

Product that sold the most: Wheat