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Roll no:566

Input: f = open("C:\Users\tambe\Downloads\grainsales.csv" ","r") print(f.read())]

Output:

GrainName,State,City,Months,Year,Sales

Ragi,Maharashtra,Nagpur,JAN,2023,1000000 Bajra,Panjab,Amritsar,FEB,2023,1500000

Ragi,Maharashtra,Nagpur,JAN,2023,1000000 Bajra,Panjab,Amritsar,FEB,2023,1500000

Ragi,Maharashtra,Nagpur,JAN,2023,1000000

Bajra,Panjab,Amritsar,FEB,2023,1500000

Oats,Hariyana,Gurugram,MARCH,2023,2000000 Sattu ,Gujarat,Surat,APRIL,2023,2500000

Sooji,Tamil Nadu,Madurai,MAY,2023,3000000

Brown rice ,Telangana,Hyderabad,JUNE,2023,3500000

Wheat,West Bengol,Asansole,JULY,2023,4000000

Corn,UP,Kanpur,AUG,2023,4500000

Ragi,Maharashtra,Nagpur,JAN,2023,1000000

Bajra,Panjab,Amritsar,FEB,2023,1500000

Oats,Hariyana,Gurugram,MARCH,2023,2000000 Sattu ,Gujarat,Surat,APRIL,2023,2500000

Sooji,Tamil Nadu,Madurai,MAY,2023,3000000

Brown rice ,Telangana,Hyderabad,JUNE,2023,3500000

Wheat,West Bengol,Asansole,JULY,2023,4000000

Corn,UP,Kanpur,AUG,2023,4500000

Sooji,Tamil Nadu,Madurai,MAY,2023,3000000

Brown rice ,Telangana,Hyderabad,JUNE,2023,3500000

Wheat,West Bengol,Asansole,JULY,2023,4000000

Corn,UP,Kanpur,AUG,2023,4500000

Ragi,Maharashtra,Nagpur,JAN,2023,1000000

Brown rice ,Telangana,Hyderabad,JUNE,2023,3500000

Wheat,West Bengol,Asansole,JULY,2023,4000000

Input:

import pandas as pd

data = {

'GrainName': ['Ragi', 'Bajra', 'Ragi', 'Bajra', 'Ragi', 'Bajra', 'Oats', 'Sattu', 'Sooji', 'Brown rice', 'Wheat',

'Corn', 'Ragi', 'Bajra', 'Oats', 'Sattu', 'Sooji', 'Brown rice', 'Wheat', 'Corn', 'Sooji', 'Brown rice', 'Wheat',

'Corn', 'Ragi', 'Brown rice', 'Wheat'],

'State': ['Maharashtra', 'Punjab', 'Maharashtra', 'Punjab', 'Maharashtra', 'Punjab', 'Haryana', 'Gujarat',

'Tamil Nadu', 'Telangana', 'West Bengal', 'Uttar Pradesh', 'Maharashtra', 'Punjab', 'Haryana', 'Gujarat',

'Tamil Nadu', 'Telangana', 'West Bengal', 'Uttar Pradesh', 'Tamil Nadu', 'Telangana', 'West Bengal', 'Uttar

Pradesh', 'Maharashtra', 'Telangana', 'West Bengal'],

'City': ['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', 'Asansole'],

'Month': ['JAN', 'FEB', 'JAN', 'FEB', 'JAN', 'FEB', 'MAR', 'APR', 'MAY', 'JUN', 'JUL', 'AUG', 'JAN', 'FEB',

'MAR', 'APR', 'MAY', 'JUN', 'JUL', 'AUG', 'MAY', 'JUN', 'JUL', 'AUG', 'JAN', 'JUN', 'JUL'],

'Year': [2023, 2023, 2023, 2023, 2023, 2023, 2023, 2023, 2023, 2023, 2023, 2023, 2023, 2023, 2023,

2023, 2023, 2023, 2023, 2023, 2023, 2023, 2023, 2023, 2023, 2023, 2023],

'Sales': [1000000, 1500000, 1000000, 1500000, 1000000, 1500000, 2000000, 2500000, 3000000,

3500000, 4000000, 4500000, 1000000, 1500000, 2000000, 2500000, 3000000, 3500000, 4000000,

4500000, 3000000, 3500000, 4000000, 4500000, 1000000, 3500000, 4000000]

}

df = pd.DataFrame(data)

df['Sales'] = pd.to\_numeric(df['Sales'])

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

best\_month = monthly\_sales.idxmax()

print("The best month for sales was:", best\_month) Output:

The best month for sales was: JUL

In [10]:

Input: import csv

dataset\_file = "C:\Users\tambe\Downloads\grainsales.csv"

total\_earnings = 0

with open(dataset\_file, 'r') as file:

csv\_reader = csv.reader(file)

next(csv\_reader)

for row in csv\_reader:

month = row[3] sales = int(row[5])

if month == 'JULY':

total\_earnings += sales print(f"The total earnings for July are: {total\_earnings}") Output:

The total earnings for July are: 16000000

Input: import csv

dataset\_file = "C:\Users\tambe\Downloads\grainsales.csv" product\_sales = {} with open(dataset\_file, 'r') as file: csv\_reader = csv.reader(file) next(csv\_reader) for row in csv\_reader: product\_name = row[0]

sales = int(row[5]) if product\_name in product\_sales:

product\_sales[product\_name] += sales

else:

product\_sales[product\_name] = sales best\_selling\_product = max(product\_sales, key=product\_sales.get) total\_sales = product\_sales[best\_selling\_product] print(f"The best-selling product is: {best\_selling\_product}") print(f"Total sales for {best\_selling\_product}: {total\_sales}")

Output: The best-selling product is: Wheat Total sales for Wheat: 1600000

Input: import csv dataset\_file = "C:\Users\tambe\Downloads\grainsales.csv" city\_sales = {} with open(dataset\_file, 'r') as file: csv\_reader = csv.reader(file) next(csv\_reader) for row in csv\_reader: city = row[2] sales = int(row[5])

if city in city\_sales:

city\_sales[city] += sales else:

city\_sales[city] = sales best\_selling\_city = max(city\_sales, key=city\_sales.get) total\_sales = city\_sales[best\_selling\_city] print(f"The best-selling city is: {best\_selling\_city}")

print(f"Total sales for {best\_selling\_city}: {total\_sales}") Output: The best-selling city is: Asansole

Total sales for Asansole: 16000000