Practical 4 Submission

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Problem Statement: **Read any real-life dataset. Store the data in Data Frames. Identify 10 grains for the given dataset.**

Implement all 20 grains using Pandas methods. The Sample Grains for the Sales Dataset are as:

1. **Which was the best month for sales? How much was earned that month?**
2. **Which product sold the most? Why do you think it did?**
3. **Which city sold the most products?**
4. **What Products are most often sold together?**

Code:

```
import pandas as pd

df=pd.read_csv("grainsales.csv",delimiter=",")


#Maximum sales in Month

month=df.groupby('Months')['Sales'].sum().idxmax()

print("\nMaximum sales are done in the month of: ",month)


sales=df.groupby('Months')['Sales'].sum().max()

print("\nThe earning made in that month is: ",sales)


#Product which sold the most and by whom
```

```
max_sales=df.groupby('GrainName')['Sales'].sum().idxmax()
print("\nThe product who sold the most is: ",max_sales)

#City which sold the most products
city=df.groupby('City')['Sales'].sum().idxmax()
print("\nThe city which sold the most products: ",city)

#Minimum sales done in the month
min_sales=df.groupby('Months')['Sales'].sum().idxmin()
print("\nMinimum sales are done in the month: ",min_sales)

#Mean of all the sales
mean=df['Sales'].mean()
print("\nMean of all the sales is: ",mean)
```

Output:


IDLE Shell 3.11.3
File Edit Shell Debug Options Window Help
Python 3.11.3 (tags/v3.11.3:f3909b8, Apr 4 2023, 23:49:59) [MSC v.1934 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: C:/Users/student/Desktop/810 EDS/Practical 4.py ==========
Maximum sales are done in the month of: JULY
The earning made in that month is: 16000000
The product who sold the most is: Wheat
The city which sold the most products: Asansole
Minimum sales are done in the month: MARCH
Mean of all the sales is: 2685185.185185185
>>>