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Subject: EDS
Practical No.2 Submission.

Problem Statement:-

Prepare/Take datasets for any real-life application. For Ex. Sales of the company. Read the data from Sales.csv/.xls/.txt. Store Product details in the List data structure. Store Supplier Details in Dictionary Data Structure. Store Customer Details in Tuple Data Structure. Now perform the following operations:
Find the most popular product for sale.
Find the best supplier for sales.
Find the customer who buys most of the products.
Find the number of customers who are 'Female'.

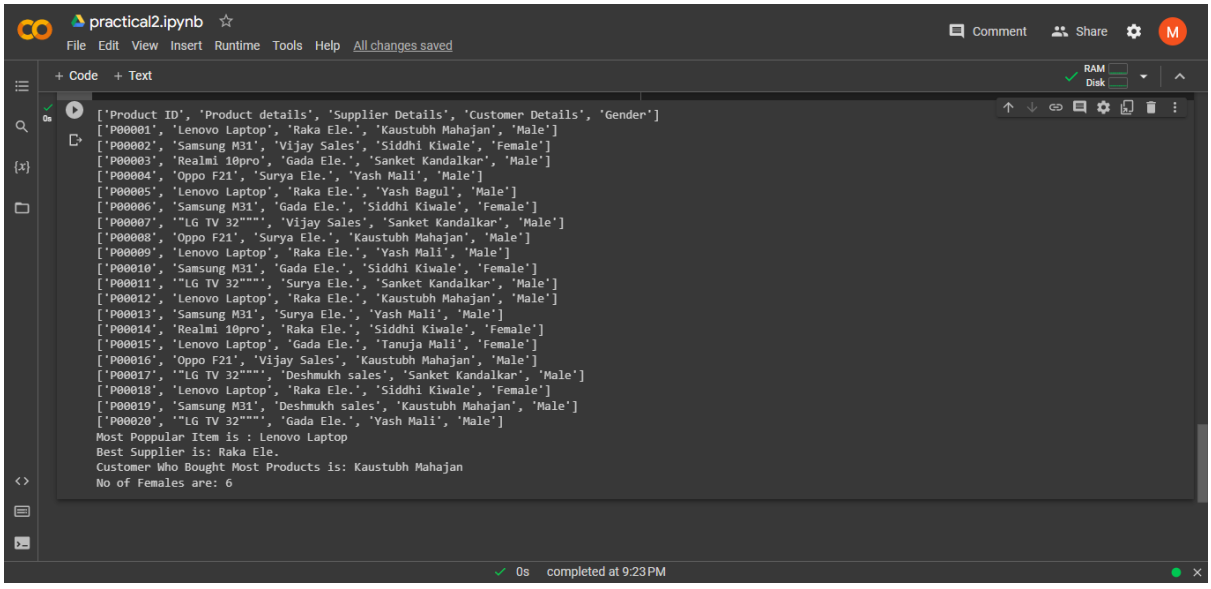
Solution:-

```
import csv

f1 = open("/content/Sales.csv","r")

product_details = [ ]

customer_details = [ ]

supplier_details = { }

supplist = [ ]

gender = [ ]


while(True):

   data = f1.readline()

   if not data:
```

```
        break;
    data = data.replace("\n","")
    temp = data.split(",")
    print(temp)
    product_details.append(temp[1])
    customer_details.append(temp[3])
    supplier_details.update({temp[1]:temp[2]})
    supplist.append(temp[2])
    gender.append(temp[4])
customer_details = tuple(customer_details)

#popular item
frequency = { }
for items in product_details:
    if items in frequency:
        frequency[items]+=1
    else:
        frequency[items]=1
marklist = sorted(frequency.items(),key = lambda x: x[1],reverse = True)
print("Most Poppular Item is :", marklist[0][0])
from collections import Counter

#Best supplier
supplierList = list(supplier_details.items())
CounterDict = Counter(supplist)
poplist  = sorted(CounterDict.items(),key = lambda x : x[1], reverse = True)
```

```
poplist = list(poplist)

print("Best Supplier is:", poplist[0][0])


#customer who bought most items

CountCustomer = Counter(customer_details)

CustomerCountList = sorted(CountCustomer.items(),key = lambda x: x[1],
reverse = True)

CustomerCountList = list(CustomerCountList)

print("Customer Who Bought Most Products is:", CustomerCountList[0][0])


#number of females

countGender = Counter(gender)

a = (countGender.get("Female"))

print("No of Females are:",a)


#closing the file

f1.close()
```

Output:-


practical2.ipynb
File Edit View Insert Runtime Tools Help All changes saved
Comment
Share
+ Code + Text
RAM
Disk
['Product ID', 'Product details', 'Supplier Details', 'Customer Details', 'Gender']
['P00001', 'Lenovo Laptop', 'Raka Ele.', 'Kaustubh Mahajan', 'Male']
['P00002', 'Samsung M31', 'Vijay Sales', 'Siddhi Kiwale', 'Female']
['P00003', 'Realmi 10pro', 'Gada Ele.', 'Sanket Kandalkar', 'Male']
['P00004', 'Oppo F21', 'Surya Ele.', 'Yash Mali', 'Male']
['P00005', 'Lenovo Laptop', 'Raka Ele.', 'Yash Bagul', 'Male']
['P00006', 'Samsung M31', 'Gada Ele.', 'Siddhi Kiwale', 'Female']
['P00007', '"LG TV 32"""', 'Vijay Sales', 'Sanket Kandalkar', 'Male']
['P00008', 'Oppo F21', 'Surya Ele.', 'Kaustubh Mahajan', 'Male']
['P00009', 'Lenovo Laptop', 'Raka Ele.', 'Yash Mali', 'Male']
['P00010', 'Samsung M31', 'Gada Ele.', 'Siddhi Kiwale', 'Female']
['P00011', '"LG TV 32"""', 'Surya Ele.', 'Sanket Kandalkar', 'Male']
['P00012', 'Lenovo Laptop', 'Raka Ele.', 'Kaustubh Mahajan', 'Male']
['P00013', 'Samsung M31', 'Surya Ele.', 'Yash Mali', 'Male']
['P00014', 'Realmi 10pro', 'Raka Ele.', 'Siddhi Kiwale', 'Female']
['P00015', 'Lenovo Laptop', 'Gada Ele.', 'Tanuja Mali', 'Female']
['P00016', 'Oppo F21', 'Vijay Sales', 'Kaustubh Mahajan', 'Male']
['P00017', '"LG TV 32"""', 'Deshmukh sales', 'Sanket Kandalkar', 'Male']
['P00018', 'Lenovo Laptop', 'Raka Ele.', 'Siddhi Kiwale', 'Female']
['P00019', 'Samsung M31', 'Deshmukh sales', 'Kaustubh Mahajan', 'Male']
['P00020', '"LG TV 32"""', 'Gada Ele.', 'Yash Mali', 'Male']
Most Poppular Item is : Lenovo Laptop
Best Supplier is: Raka Ele.
Customer Who Bought Most Products is: Kaustubh Mahajan
No of Females are: 6
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