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Practical 2

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:

1. Find the most popular product for sale.
2. Find the best supplier for sales.
3. Find the customer who buys most of the products.
4. Find the number of customers who are 'Female'

Code –

practical 2.py - C:\Users\ASUS\OneDrive\Desktop\eds practical 2\practical 2.py (3.11.3)

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```
f=open("sales.csv","r")
data=f.read()
lines=data.splitlines()

p_details=[]
c_details=()
s_details={}
g_details={}
ctemp=[]
pfc={}
cfc={}
male=0
female=0
freq={}

for l in lines:
    words=l.split(",")
    p_details.append(words[1])
    ctemp.append(words[3])
    s_details[words[0]]=words[2]
    g_details[words[3]]=words[4]

#1) Find the most popular product for sale
for p in p_details:
    if p not in pfc:
        pfc[p]=1
    else:
        pfc[p]=pfc[p]+1

max=0
pn=""
for k,v in pfc.items():
    if(max<v):
        max=v
        pn=k

print("The most popular product for sale -",pn)
```

#2) Find the customer who buys most of the products

```
for c in ctemp:
    if c not in cfc:
        cfc[c]=1
    else:
        cfc[c]=cfc[c]+1

max=0
cd=""
for a,b in cfc.items():
    if(max<b):
        max=b
        cd=a
print("The customer who buys most of the products -",cd)
```

#3) Find the number of customers who are 'Female'

```
for k,v in g_details.items():
    if(v=="Female"):
        female=female+1
    else:
        male=male+1

print("The number of customers who are 'Female' -",female)
```

#4) Find the best supplier for sales.

```
for s in s_details.values():
    if s in freq:
        freq[s]=freq[s]+1
    else:
        freq[s]=1

max=0
rf=""
for k,v in freq.items():
    if(max<v):
        max=v
        rf=k
print("The best supplier for sales -",rf)
```

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\ASUS\OneDrive\Desktop\eds practical 2\practical 2.py ====
The most popular product for sale - Lenovo Laptop
The customer who buys most of the products - Kaustubh Mahajan
The number of customers who are 'Female'- 2
The best supplier for sales - Raka Ele.
>>>
```