```
Name: atharav khisti
batch:E4
ROLL:573
PRN:202201040160
```

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```
Product_details=[]
Supplier_details={}
Customer_details=[]
gender={}

fp1=open("Sales.csv","r")
data=fp1.readline( )


while(True):
    data=fp1.readline()
    if not data:
        break;
    print (data)
    data=data.replace("\n","")
    temp=data.split(",")
    print (temp)
    Product_details.append(temp[1])
    Customer_details.append(temp[3])
    Supplier_details.update({temp[0]:temp[2]})
    gender.update({temp[3]: temp [4]})

     P00001,Lenovo Laptop,Raka Ele.,Kaustubh Mahajan,Male

     ['P00001', 'Lenovo Laptop', 'Raka Ele.', 'Kaustubh Mahajan', 'Male']
     P00002,Samsung M31,Vijay Sales,Siddhi Kiwale,Female

     ['P00002', 'Samsung M31', 'Vijay Sales', 'Siddhi Kiwale', 'Female']
     P00003,Realmi 10pro,Gada Ele.,Sanket Kandalkar,Male

     ['P00003', 'Realmi 10pro', 'Gada Ele.', 'Sanket Kandalkar', 'Male']
     P00004,Oppo F21,Surya Ele.,Yash Mali,Male
```

```
['P00004', 'Oppo F21', 'Surya Ele.', 'Yash Mali', 'Male']
P00005,Lenovo Laptop,Raka Ele.,Yash Bagul,Male

['P00005', 'Lenovo Laptop', 'Raka Ele.', 'Yash Bagul', 'Male']
P00006,Samsung M31,Gada Ele.,Siddhi Kiwale,Female

['P00006', 'Samsung M31', 'Gada Ele.', 'Siddhi Kiwale', 'Female']
P00007,"LG TV 32""",Vijay Sales,Sanket Kandalkar,Male

['P00007', '"LG TV 32"""', 'Vijay Sales', 'Sanket Kandalkar', 'Male']
P00008,Oppo F21,Surya Ele.,Kaustubh Mahajan,Male

['P00008', 'Oppo F21', 'Surya Ele.', 'Kaustubh Mahajan', 'Male']
P00009,Lenovo Laptop,Raka Ele.,Yash Mali,Male

['P00009', 'Lenovo Laptop', 'Raka Ele.', 'Yash Mali', 'Male']
P00010,Samsung M31,Gada Ele.,Siddhi Kiwale,Female

['P00010', 'Samsung M31', 'Gada Ele.', 'Siddhi Kiwale', 'Female']
P00011,"LG TV 32""",Surya Ele.,Sanket Kandalkar,Male

['P00011', '"LG TV 32"""', 'Surya Ele.', 'Sanket Kandalkar', 'Male']
P00012,Lenovo Laptop,Raka Ele.,Kaustubh Mahajan,Male

['P00012', 'Lenovo Laptop', 'Raka Ele.', 'Kaustubh Mahajan', 'Male']
P00013,Samsung M31,Surya Ele.,Yash Mali,Male

['P00013', 'Samsung M31', 'Surya Ele.', 'Yash Mali', 'Male']
P00014,Realmi 10pro,Raka Ele.,Siddhi Kiwale,Female

['P00014', 'Realmi 10pro', 'Raka Ele.', 'Siddhi Kiwale', 'Female']
P00015,Lenovo Laptop,Gada Ele.,Tanuja Mali,Female

['P00015', 'Lenovo Laptop', 'Gada Ele.', 'Tanuja Mali', 'Female']
P00016,Oppo F21,Vijay Sales,Kaustubh Mahajan,Male

['P00016', 'Oppo F21', 'Vijay Sales', 'Kaustubh Mahajan', 'Male']
P00017,"LG TV 32""",Deshmukh sales,Sanket Kandalkar,Male

['P00017', '"LG TV 32"""', 'Deshmukh sales', 'Sanket Kandalkar', 'Male']
P00018,Lenovo Laptop,Raka Ele.,Siddhi Kiwale,Female

['P00018', 'Lenovo Laptop', 'Raka Ele.', 'Siddhi Kiwale', 'Female']
P00019,Samsung M31,Deshmukh sales,Kaustubh Mahajan,Male

['P00019', 'Samsung M31', 'Deshmukh sales', 'Kaustubh Mahajan', 'Male']
P00020,"LG TV 32""",Gada Ele.,Yash Mali,Male
```

```
fp1.close( )
Customers_details=tuple(Customer_details)
print(type(Customer_details))
```

```
     <class 'list'>
```

Best Product

```
frequency = {}
for item in Product_details:
    if item in frequency:
        frequency[item] += 1
    else:
        frequency[item] = 1
print(frequency)
marklist = sorted(frequency.items(),key = lambda x:x[1], reverse = True)
sortdict = dict(marklist)
print(sortdict)
print("The most popular product for sales",list(sortdict.keys())[0],"sold",list(sortdict.values())[0],"times")
```

```
     {'Lenovo Laptop': 6, 'Samsung M31': 5, 'Realmi 10pro': 2, 'Oppo F21': 3, '"LG TV 32"""': 4}
     {'Lenovo Laptop': 6, 'Samsung M31': 5, '"LG TV 32"""': 4, 'Oppo F21': 3, 'Realmi 10pro': 2}
     The most popular product for sales Lenovo Laptop sold 6 times
```

Best suplier

```
frequency = {}
for item in Supplier_details.values():
    if item in frequency:
        frequency[item] += 1
    else:
        frequency[item] = 1
print(frequency)
marklist = sorted(frequency.items(),key = lambda x:x[1], reverse = True)
sortdict = dict(marklist)
print(sortdict)
print("Best Supplier",list(sortdict.keys())[0],"sold",list(sortdict.values())[0],"Items")
```

```
{'Raka Ele.': 6, 'Vijay Sales': 3, 'Gada Ele.': 5, 'Surya Ele.': 4, 'Deshmukh sales': 2}
{'Raka Ele.': 6, 'Gada Ele.': 5, 'Surya Ele.': 4, 'Vijay Sales': 3, 'Deshmukh sales': 2}
Best Supplier Raka Ele. sold 6 Items
```

Most Buyer

```
frequency = {}
for item in Customer_details:
    if item in frequency:
        frequency[item] += 1
    else:
        frequency[item] = 1
marklist = sorted(frequency.items(),key = lambda x:x[1], reverse = True)
print("Most Product Buyer",list(sortdict.keys())[0],"buy",list(sortdict.values())[0],"Items")
```

```
Most Product Buyer Raka Ele. buy 6 Items
```

Female Gender Counter

```
from collections import Counter
countGender = Counter(gender)
a = (countGender.get("Female"))
print(f'No of Females are:(6)')
```

```
No of Females are:(6)
```