```python
Product_details=[]
Supplier_details=dict()
Customer_details=[]
gender={}

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

while(True):

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

fp1.close()

Customer_details=tuple(Customer_details)
print(type(Customer_details))
```

```
<class 'tuple'>
```

```python
print("\nProduct_details\n",Product_details,end="")
print("\n\nCustomer_details\n",Customer_details,end="")
print("\n\nSupplier_details\n",Supplier_details,end="")
print("\n\nGender_details\n",gender,end="")
```

```
Product_details
 ['Lenovo Laptop', 'Samsung M31', 'Realmi 10pro', 'Oppo F21', 'Lenovo
Laptop', 'Samsung M31', '"LG TV 32"""', 'Oppo F21', 'Lenovo Laptop',
'Samsung M31', '"LG TV 32"""', 'Lenovo Laptop', 'Samsung M31', 'Realmi
10pro', 'Lenovo Laptop', 'Oppo F21', '"LG TV 32"""', 'Lenovo Laptop',
'Samsung M31', '"LG TV 32"""']

Customer_details
 ('Kaustubh Mahajan', 'Siddhi Kiwale', 'Sanket Kandalkar', 'Yash
Mali', 'Yash Bagul', 'Siddhi Kiwale', 'Sanket Kandalkar', 'Kaustubh
Mahajan', 'Yash Mali', 'Siddhi Kiwale', 'Sanket Kandalkar', 'Kaustubh
Mahajan', 'Yash Mali', 'Siddhi Kiwale', 'Tanuja Mali', 'Kaustubh
Mahajan', 'Sanket Kandalkar', 'Siddhi Kiwale', 'Kaustubh Mahajan',
'Yash Mali')

Supplier_details
 {'P00001': 'Raka Ele.', 'P00002': 'Vijay Sales', 'P00003': 'Gada
```

Ele.', 'P00004': 'Surya Ele.', 'P00005': 'Raka Ele.', 'P00006': 'Gada
Ele.', 'P00007': 'Vijay Sales', 'P00008': 'Surya Ele.', 'P00009':
'Raka Ele.', 'P00010': 'Gada Ele.', 'P00011': 'Surya Ele.', 'P00012':
'Raka Ele.', 'P00013': 'Surya Ele.', 'P00014': 'Raka Ele.', 'P00015':
'Gada Ele.', 'P00016': 'Vijay Sales', 'P00017': 'Deshmukh sales',
'P00018': 'Raka Ele.', 'P00019': 'Deshmukh sales', 'P00020': 'Gada
Ele.'}

Gender_details
 {'Kaustubh Mahajan': 'Male', 'Siddhi Kiwale': 'Female', 'Sanket
Kandalkar': 'Male', 'Yash Mali': 'Male', 'Yash Bagul': 'Male', 'Tanuja
Mali': 'Female'}

```python
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

```python
frequency = {}
for item in Customer_details:
    if item in frequency:
       frequency[item] += 1
    else:
        frequency[item] = 1

print("Freqenct is as below:\n",frequency)
marklist = sorted(frequency.items(), key=lambda x:x[1],reverse=True)
sortdict = dict(marklist)
print("\nSorted dict is as below:\n",sortdict)
print("\n\nThe customer who buys most of the
products",list(sortdict.keys())[0],
      " buy ",list(sortdict.values())[0],"Items")
```

Freqenct is as below:
 {'Kaustubh Mahajan': 5, 'Siddhi Kiwale': 5, 'Sanket Kandalkar': 4,
'Yash Mali': 4, 'Yash Bagul': 1, 'Tanuja Mali': 1}

Sorted dict is as below:
 {'Kaustubh Mahajan': 5, 'Siddhi Kiwale': 5, 'Sanket Kandalkar': 4, 'Yash Mali': 4, 'Yash Bagul': 1, 'Tanuja Mali': 1}

The customer who buys most of the products Kaustubh Mahajan buy 5 Items

```python
from collections import Counter
counter = dict(Counter(Customer_details))
names=list(counter.keys())
print(names)
male=0
female=0

for name in names:
    if gender[name]=="Male":
        male=male+1
    if gender[name]=="Female":
        female+=1
print("Total no of Male=",male)
print("Total no of Female=",female)
```

['Kaustubh Mahajan', 'Siddhi Kiwale', 'Sanket Kandalkar', 'Yash Mali', 'Yash Bagul', 'Tanuja Mali']
Total no of Male= 4
Total no of Female= 2