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

fpl=open("/content/sample_data/sales620.csv","r")
data=fpl.readline()

while(True):
    data=fpl.readline()
    if not data:
        break;
    #print(data)
    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]})

fpl.close()

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

```
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="")
```

OUTPUT:

```
<class 'tuple'>


Product_details

  ['Lenovo Laptop', 'Samsung A9', 'Realmi 10pro', 'Oppo F21', 'LG TV']


Customer_details

  ('Riya Jha', 'Chirag Gupta', 'Priya Acharya', 'David Bonal', 'Shlok Gupta')


Supplier_details

  {'S0001': 'Vijay sales', 'S0002': 'Surya Ele.', 'S0003': 'Vijay sales', 'S0004': 'Surya Ele.', 'S0005': 'Vijay
sales'}


Gender_details

  {'Riya Jha': 'Female', 'Chirag Gupta': 'Male', 'Priya Acharya': 'Female', 'David Bonal': 'Male', 'Shlok
Gupta': 'Male'}
```

```
# Most popular product for sales.

frequency = {}#{Lenovo Laptop:3}

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")
```

OUTPUT:

```
{'Lenovo Laptop': 1, 'Samsung A9': 1, 'Realmi 10pro': 1, 'Oppo F21': 1, 'LG TV': 1}
{'Lenovo Laptop': 1, 'Samsung A9': 1, 'Realmi 10pro': 1, 'Oppo F21': 1, 'LG TV': 1}
```

The most popular product for sales Lenovo Laptop sold 1 times

```
# Best supplier for sales.
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("The most popular supplier for sales",list(sortdict.keys())[0],"sold",list(sortdict.values())[0],"items")
```

OUTPUT:

```
{'Vijay sales': 3, 'Surya Ele.': 2}
{'Vijay sales': 3, 'Surya Ele.': 2}
```

The most popular supplier for sales Vijay sales sold 3 items

Customer who buys most of the products.

```
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")
```

OUTPUT:

Freqenct is as below:

```
 {'Riya Jha': 1, 'Chirag Gupta': 1, 'Priya Acharya': 1, 'David Bonal': 1, 'Shlok Gupta': 1}
```

Sorted dict is as below:

```
 {'Riya Jha': 1, 'Chirag Gupta': 1, 'Priya Acharya': 1, 'David Bonal': 1, 'Shlok Gupta': 1}
```

The customer who buys most of the products Riya Jha buy 1 items

Identify Unique Customer

```
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)
```

OUTPUT:

```
['Riya Jha', 'Chirag Gupta', 'Priya Acharya', 'David Bonal', 'Shlok Gupta']
Total no of Male= 3
Total no of Female= 2
```