```
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EDS practical-2

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

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

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[0]:temp[2]})
   gender.update({temp[3]:temp[4]})

f1.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="")
# The most popular product

 def most_frequent(Product_details):
     counter = 0
     num = Product_details[0]

     for i in Product_details:
         curr_frequency = Product_details.count(i)
         if (curr_frequency> counter):
            counter = curr_frequency
            num = i
     return num
print(most_frequent(Product_details))
#The most popular supplier
```

```
frequency =  {}
 #iterating over the last
for item in Supplier_details.values():
   # Checking the element in dictionary
```

```
   if item in frequency:
     #incrementing the counter
     frequency[item] += 1
   else:
    # initializing the count
    frequency[item] = 1
#printing the frequency
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")



# The Customer who buys most of the products

frequency = {}
#iterating over the list
for item in Customer_details:
  #checking the elements in dictionary
  if item in frequency:
    #incrementing the counter
    frequency[item] += 1
  else:
     #initalizing the count
     frequency[item] = 1
#printing the frequency
print("Frequency is as given below: \n ",frequency)
marklist = sorted(frequency.items(), key=lambda x:x[1],reverse=True)
sortlist = 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")
# No. customer who are females
from collections import Counter
counter = dict(Counter(Customer_details))
names=list(counter.keys())
print(names)
male=0
female=0

for name in names:
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  if gender[name] == "Male":
    male += 1
  if gender[name] == "Female":
    female += 1

print("Total no of male =",male)
print("Total no of Female =",female)
```

```
Product_details
 ['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
 ('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
 {'Product ID': '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
 {'Customer Details': 'Gender', 'Kaustubh Mahajan': 'Male', 'Siddhi Kiwale':
'Female', 'Sanket Kandalkar': 'Male', 'Yash Mali': 'Male', 'Yash Bagul': 'Male',
'Tanuja Mali': 'Female'}
```

```
 # The most popular product
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```
Lenovo Laptop
```

```
#The most popular supplier
```

```
{'Supplier Details': 1, '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, 'Supplier Details': 1}
the most popular Supplier for sales Raka Ele. sold 6 Items
```

```
# The Customer who buys most of the products
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```
Frequency is as given below:
  {'Customer Details': 1, 'Kaustubh Mahajan': 5, 'Siddhi Kiwale': 5, 'Sanket
Kandalkar': 4, 'Yash Mali': 4, 'Yash Bagul': 1, 'Tanuja Mali': 1}

Sorted Dict is as below;
 {'Raka Ele.': 6, 'Gada Ele.': 5, 'Surya Ele.': 4, 'Vijay Sales': 3, 'Deshmukh
sales': 2, 'Supplier Details': 1}


The customer who buys most of the products R.  buy 6 Items
```

```
# No. customer who are females
```
```
['Customer Details', 'Kaustubh Mahajan', 'Siddhi Kiwale', 'Sanket Kandalkar',
'Yash Mali', 'Yash Bagul', 'Tanuja Mali']
Total no of male = 4
Total no of Female = 2
```