Assignment: 2

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

f1=open("/content/Sales.csv","r")
data=f1.readline()

while(True):
  data=f1.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]})

f1.close()

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

Output:

<class 'tuple'>

```
print("\n\nProduct_details\n",Product_details)
print("\n\nCustomer_details\n",Customer_details)
print("\n\nSupplier_details\n",Supplier_details)
```

```
print("\n\ngender\n",gender)
```

Output:

```
Product_details
 ['Lenovo Laptop', 'Samsung M31', 'Realme 10 Pro', 'Oppo F21', 'Lenovo
Laptop', 'Samsung M31', '"LG TV 32"""', 'Oppo F21', 'Lenovo Laptop',
'Samsung M31', '"LG TV 32"""', 'Lenovo Laptop', 'Samsung M31', 'Realme 10
Pro', '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 Borkar', '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 Elec.', 'P00002': 'Vijay Sales', 'P00003': 'Gada Elec.',
'P00004': 'Surya Elec.', 'P00005': 'Raka Elec.', 'P00006': 'Gada Elec.',
'P00007': 'Vijay Sales', 'P00008': 'Surya Elec.', 'P00009': 'Raka Elec.',
'P00010': 'Gada Elec.', 'P00011': 'Surya Elec.', 'P00012': 'Raka Elec.',
'P00013': 'Surya Elec.', 'P00014': 'Raka Elec.', 'P00015': 'Gada Elec.',
'P00016': 'Vijay Sales', 'P00017': 'Deshmukh Sales', 'P00018': 'Raka
Elec.', 'P00019': 'Deshmukh Sales', 'P00020': 'Gada Elec.'}


gender
 {'Kaustubh Mahajan': 'Male ', 'Siddhi Kiwale': 'Female ', 'Sanket
Kandalkar': 'Male ', 'Yash Mali': 'Male ', 'Yash Borkar': 'Male ', 'Tanuja
Mali': 'Female '}
```

```
# 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))
```

Output:

Lenovo Laptop

```
#The most popular Supplier for sales

frequency = {}
# iterating over the list
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:

```
{'Raka Elec.': 6, 'Vijay Sales': 3, 'Gada Elec.': 5, 'Surya Elec.': 4,
'Deshmukh Sales': 2}
{'Raka Elec.': 6, 'Gada Elec.': 5, 'Surya Elec.': 4, 'Vijay Sales': 3,
'Deshmukh Sales': 2}
The most popular Supplier for sales Raka Elec.  sold  6 Items
```

```
#The customer who buys most of the products

frequency = {}
# iterating over the list
for item in Customer_details:
  if item in frequency:
    frequency[item] += 1
  else:
    frequency[item] = 1
print("Frequency is as given 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:

```
Frequency is as given below:
  {'Kaustubh Mahajan': 5, 'Siddhi Kiwale': 5, 'Sanket Kandalkar': 4, 'Yash
Mali': 4, 'Yash Borkar': 1, 'Tanuja Mali': 1}

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


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

```
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 += 1
  if gender[name] == "Female":
    female += 1

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

Oputut:

```
['Kaustubh Mahajan', 'Siddhi Kiwale', 'Sanket Kandalkar', 'Yash Mali',
'Yash Borkar', 'Tanuja Mali']
Total no of Male = 0
Total no of Female = 0
```