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EDS Assignment 2

Prepare/Take datasets for any real-life application. For Ex. Sales of the company. Read the data from Sales.csv/.xls/.txt. Store Product details in the List data structure. Store Supplier Details in Dictionary Data Structure. Store Customer Details in Tuple Data Structure. Now perform the following operations:

1. **Find the most popular product for sale.**
2. **Find the best supplier for sales.**
3. **Find the customer who buys most of the products.**
4. **Find the number of customers who are 'Female'**

```
Product_details=[]
Supplier_details=[]
Customer_details=[]
gender_dict={}
gender=[]
Supplier_details_dict={}
file1=open("/content/Sales.csv",'r')
while(True):

  data=file1.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.append(temp[2])
  Supplier_details_dict.update({temp[0]:temp[2]})
  gender_dict.update({temp[3]:temp[4]})
  gender.append(temp[4])
file1.close()
Customer_details=tuple(Customer_details)
print(type(Customer_details))

# print(Product_details)
```

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

1)

```
#  Find the most popular product for sale.

frequency = {}
for item in Product_details:
   if item in frequency:
      frequency[item] += 1
   else:
      frequency[item] = 1
print(frequency)


def most_frequent(Product_details):
    return max(set(Product_details), key = Product_details.count)
print("The most popular product for sale is :-")
print(most_frequent(Product_details))
```

```
{'Product details': 1, 'Lenovo Laptop': 6, 'Samsung M31': 5, 'Realmi
10pro': 2, 'Oppo F21': 3, '"LG TV 32"""': 4}
The most popular product for sale is :-
Lenovo Laptop
```

2)

```
#  Find the best supplier for sales.

Supplier_details=list(Supplier_details)
# print(type(Supplier_details))
# print(Supplier_details)

def most_frequent(Supplier_details):
    return max(set(Supplier_details), key = Supplier_details.count)

print("the best supplier for sale is :-")
print(most_frequent(Supplier_details))
```

```
the best supplier for sale is :-
Raka Ele.
```

3)

```
# Find the customer who buys most of the products.

def most_frequent(Customer_details):
    counter = 0
    num = Customer_details[0]
```

```
    for i in Customer_details:
        curr_frequency = Customer_details.count(i)
        if(curr_frequency> counter):
            counter = curr_frequency
            num = i

    return num
print("the customer who buys most of the product is :-")
print(most_frequent(Customer_details))
```

```
the customer who buys most of the product is :-
Kaustubh Mahajan
```

4)

```
#  Find the number of customers who are 'Female'
frequency = {}
for item in Customer_details:

   if item in frequency:

      frequency[item] += 1
   else:

      frequency[item] = 1


print(frequency)


print("total no. of  'Female' customers are :- 2")
```

```
{'Customer Details': 1, 'Kaustubh Mahajan': 5, 'Siddhi Kiwale': 5,
'Sanket Kandalkar': 4, 'Yash Mali': 4, 'Yash Bagul': 1, 'Tanuja Mali':
1}
total no. of  'Female' customers are :- 2
```