

Name: Abhay Isal

Roll No. =519

Batch=E1

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

```