

ASSIGNMENT- 2

G3:BATCH ROLL NO:747

PROBLEM STATEMENT: 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:

Find the most popular product for sale.

Find the best supplier for sales.

Find the customer who buys most of the products.

Find the number of customers who are 'Female'.

LINK:

CODE:

```
product_details=[]
customer_details=[]
supplier_details=dict()
gender=dict()
import csv

# Read the data from CSV
sales_data = []
with open('/content/drive/MyDrive/747_vaishnavi nikam/sales (1).csv', 'r')
as file:
    reader = csv.reader(file)
    next(reader) # Skip the header row
    for row in reader:
        product_details.append(row[1])
        customer_details.append(row[3])
        supplier_details.update({row[0]:row[2]})
        gender.update({row[3]:row[4]})
        sales_data.append((product_details, supplier_details,
customer_details, gender))
# Find the most popular product for sale.
sorted_product = sorted(product_details,key=len, reverse=True)
popular_product = sorted_product[0]
print("Popular product is:",popular_product)
#Find the best supplier for sales.
```

```
sorted_seller = sorted(supplier_details.items(), key=lambda x: x[1],
reverse=True)
max_item = sorted_seller[0]
best_seller = max_item[1]
print("Best sells man is: ",best_seller)
#Find the customer who buys most of the products.
sorted_customer = sorted(customer_details,key=len, reverse=True)
popular_customer = sorted_customer[0]
print("Popular customer is:",popular_customer)
#Find the number of customers who are 'Female'
sorted_gender = sorted(gender.values(), reverse=True)
female_count = sorted_gender.count("Female")
print("Number of females are: ",female_count)
```

output:

```
➞ Popular product is: Lenovo Laptop
Best sells man is: Vijay Sales
Popular customer is: Kaustubh Mahajan
Number of females are: 2
```

OUTPUT:

```
+ Code + Text
THE STUDENT DETAIL FILE CONTENTS ARE: [['NAME', 'ROLL NO', 'GENDER', 'BATCH'], ['Priyali', '201', 'F', 'B1'], ['Sumitra', '202', 'F', 'B2'], ['Nandini', '203', 'F', 'B3'], ['Aswini', '204', 'F', 'B4'], ['Kedar', '207', 'M', 'B3'], ['Aaditya', '205', 'M', 'B1'], ['Darshan', '210', 'M', 'B4'], ['Sumitra', '202', 'F', 'B2']]

THE PLACEMENT FILE DETAILS ARE: [['ROLL NO', 'COMPANY NAME', 'SALARY'], ['201', 'LG', '1000000'], ['202', 'PANASONIC', '2000000'], ['203', 'HITACHI', '1500000'], ['204', 'WOLKSWAGEN', '3500000'], ['207', 'UNILIVER INDIA', '2000000'], ['205', 'TATA', '4000000'], ['210', 'RELIANCE', '1900000'], ['202', 'PANASONIC', '2000000']]

THE GRADES FILE DETAILS ARE: [['ROLL NO', 'CORE', 'PSYCHOLOGY', 'ECONOMICS'], ['201', '100', '89', '89'], ['202', '95', '68', '65'], ['203', '89', '98', '98'], ['204', '69', '78', '69'], ['207', '96', '99', '91'], ['205', '99', '65', '98'], ['210', '65', '98', '99'], ['202', '95', '68', '65']]

The merged file is: [['NAME', 'ROLL NO', 'GENDER', 'BATCH', 'ROLL NO', 'COMPANY NAME', 'SALARY', 'ROLL NO', 'CORE', 'PSYCHOLOGY', 'ECONOMICS'], ['Priyali', '201', 'F', 'B1', '201', 'LG', '1000000', '201', '100', '89', '89'], ['Sumitra', '202', 'F', 'B2', '202', 'PANASONIC', '2000000', '202', '95', '68', '65'], ['Nandini', '203', 'F', 'B3', '203', 'HITACHI', '1500000', '203', '89', '98', '98'], ['Aswini', '204', 'F', 'B4', '204', 'WOLKSWAGEN', '3500000', '204', '69', '78', '69'], ['Kedar', '207', 'M', 'B3', '207', 'UNILIVER INDIA', '2000000', '207', '96', '99', '91'], ['Aaditya', '205', 'M', 'B1', '205', 'TATA', '4000000', '205', '99', '65', '98'], ['Darshan', '210', 'M', 'B4', '210', 'RELIANCE', '1900000', '210', '65', '98', '99'], ['Sumitra', '202', 'F', 'B2', '202', 'PANASONIC', '2000000', '202', '95', '68', '65']]

The salary data is:
1000000
2000000
1500000
3500000
4000000
100000
2000000
2500000
1700000
1900000

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1000000
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1700000
1900000

The max salary is: 4000000
The min salary is: 100000
```

```
The salary data is:
1000000
2000000
1500000
3500000
4000000
100000
2000000
2500000
1700000
1900000

The max salary is: 4000000

The min salary is: 100000

The highest grade is: 100

The lowest grade is: 65
The average salary is: 2020000.0

Top 5 salary records are:
['Aswini', '204', 'F', 'B4', '204', 'WOLKSWAGEN', '3500000', '204', '69', '78', '69']
['Kedar', '207', 'M', 'B3', '207', 'UNILIVER INDIA', '2000000', '207', '96', '99', '91']
['Aaditya', '205', 'M', 'B1', '205', 'TATA', '4000000', '205', '99', '65', '98']
['Darshan', '210', 'M', 'B4', '210', 'RELIANCE', '1900000', '210', '65', '98', '99']
['Sumitra', '202', 'F', 'B2', '202', 'PANASONIC', '2000000', '202', '95', '68', '65']
```