

ASSIGNMENT NO. 2

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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: 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'

#Assignment 2

	A	B	C	D	E
1	ID	Car Details	Supplier Details	Customer Details	Gender
2	P1	BMW	Vedant BMW	Sarthak Ingle	Male
3	P2	Audi	Sarthak Audi	Tushan Patel	Male
4	P3	Lamborghini	Trident Lamborghini	Nikita Warke	Female
5	P4	Mercedes	Harsh Mercedes	Swayam Mahajan	Male
6	P5	Porche	Girish Porche	Pragati Patil	Female
7	P6	Porche	Girish Porche	Gayatri Bhide	Female
8	P7	BMW	Vedant BMW	Faisal Shaikh	Male
9	P8	BMW	Vedant BMW	Jagruti Yadav	Female
10	P10	Bently	Nitin Bently	Kalyani Lawand	Female

https://drive.google.com/file/d/1u336b2uiNeOLt1cqobBzMOpB8ryH_a0/view?usp=drivesdk

```
Car_Details=[]
Supplier_Details=dict()
Customer_Details=[]
Gender={}
fp1=open("/content/drive/MyDrive/CAR INFOR.csv","r")
data=fp1.readline()
```

```

while(True):

    data=fpl.readline()
    if not data:
        break;

    temp=data.split(",")
    Car_Details.append(temp[1])
    Customer_Details.append(temp[3])
    Supplier_Details.update({temp[0]:temp[2]})
    Gender.update({temp[3]:temp[4]})
fpl.close()
Customer_Details=tuple(Customer_Details)
print(type(Customer_Details))
print("\nProduct Details\n",Car_Details,end="")
print("\nCustomer Details\n",Customer_Details,end="")
print("\nSupplier Details\n",Supplier_Details,end="")
print("\nGender Details\n",Gender,end="")
frequency={}

for item in Car_Details:
    if item in frequency:
        frequency[item] += 1 #increment the counter
    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 product for
sales",list(sortdict.keys())[0],"sold",list(sortdict.values())[0],"time
s")\

```

OUTPUT

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

Product Details

```
['BMW', 'Audi', 'Lamborghini', 'Mercedes', 'Porche', 'Porche', 'BMW',
'BMW', 'Bently']
```

Customer Details

```
('Sarthak Ingle', 'Tushan Patel', 'Nikita Warke', 'Swayam Mahajan',
'Pragati Patil', 'Gayatri Bhide', 'Faisal Shaikh', 'Jagruti Yadav',
'Kalyani Lawand')
```

Supplier Details

```
{'P1': 'Vedant BMW', 'P2': 'Sarthak Audi', 'P3': 'Trident Lamborghini',
'P4': 'Harsh Mercedes', 'P5': 'Girish Porche', 'P6': 'Girish Porche',
'P7': 'Vedant BMW', 'P8': 'Vedant BMW', 'P10': 'Nitin Bently'}
```

Gender Details

```
{'Sarthak Ingle': 'Male\n', 'Tushan Patel': 'Male\n', 'Nikita Warke':
'Female\n', 'Swayam Mahajan': 'Male\n', 'Pragati Patil': 'Female\n',
```

```
'Gayatri Bhide': 'Female\n', 'Faisal Shaikh': 'Male\n', 'Jagruti
Yadav': 'Female\n', 'Kalyani Lawand': 'Female\n'}{'BMW': 3, 'Audi': 1,
'Lamborghini': 1, 'Mercedes': 1, 'Porche': 2, 'Bently': 1}
{'BMW': 3, 'Porche': 2, 'Audi': 1, 'Lamborghini': 1, 'Mercedes': 1,
'Bently': 1}
```

The most popular product for sales BMW sold 3 times

2.

```
frequency={}
for item in Car_Details:
    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 product for
sales",list(sortdict.keys())[0],"sold",list(sortdict.values())[0],"time
s")
```

OUTPUT

```
{'BMW': 3, 'Audi': 1, 'Lamborghini': 1, 'Mercedes': 1, 'Porche': 2,
'Bently': 1}
{'BMW': 3, 'Porche': 2, 'Audi': 1, 'Lamborghini': 1, 'Mercedes': 1,
'Bently': 1}
The most popular product for sales BMW sold 3 times
```

3.

```
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":
        print("Total no. of Males",Male)
    print("Total no. of Females",Female)
```

OUTPUT

```
['Sarthak Ingle', 'Tushan Patel', 'Nikita Warke', 'Swayam Mahajan',
'Pragati Patil', 'Gayatri Bhide', 'Faisal Shaikh', 'Jagruti Yadav',
'Kalyani Lawand']
```

4.

```
frequency={}
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],"times")

```

OUTPUT

```

{'Vedant BMW': 3, 'Sarathak Audi': 1, 'Trident Lamborghini': 1, 'Harsh Mercedes': 1, 'Girish Porche': 2, 'Nitin Bently': 1}
{'Vedant BMW': 3, 'Girish Porche': 2, 'Sarathak Audi': 1, 'Trident Lamborghini': 1, 'Harsh Mercedes': 1, 'Nitin Bently': 1}
The most popular supplier for sales Vedant BMW sold 3 times

```

5. <https://drive.google.com/file/d/lmI6tr2isxKxWXlersfCTpOwGQj-Ngp0/view>

	A	B	C	D	E
1	movie	director	genre	viewers	year
2	Fast X	Louis Leterrier	Action	3.5	2023
3	The Kerala Story	Nandini Thorat	Inspired	2.17	2023
4	The Harry Potter	Akshat Dhake	Drama	1.55	2018
5	Dhoom 2	Divya Galkal	Comedy	2.3	2017
6	Dhoom 3	Dheeraj Singh	Comedy	1.41	2019
7	Jurassic World	Rahul Jagtap	Drama	3.07	2015
8	Bhootnath	Leela Jain	Comedy	1.12	2015
9	Sita Raman	Bhumika Sejwal	Drama	3.41	2022
10	Avenger	Viraj Patel	Action	1.11	2022
11	Student of the Year	Girish Rajput	Comedy	2.41	2020
12	Drishyam	Manoj Singh	drama	2.61	2021
13	Dangal	Amir Khan	Inspired	1.12	2014
14	Race 3	Aditi Kharche	Action	1.01	2013
15	Golmaal	Jasmine Goni	Comedy	2.63	2012

```

print("DATASET 2")
file2 = open("/content/drive/MyDrive/Movie details.csv","r")
movie= []
director = {}
genre = []
viewers = {}
year = ()

ylist = list(year)

while True:
    data = file2.readline()

```

```

if not data:
    break

    temp = data.split(",")
    movie.append(temp[1])
    director.update({temp[1]:temp[2]})
    genre.append(temp[3])
    viewers.update({temp[1]:float(temp[4])})
    ylist.append(int(temp[5]))
file2.close()
year = tuple(ylist)
#printing the data
print("Movie = ",movie)
print("\nDirector = ",director)
print("\nGenres = ",genre)
print("\nViewers = ",viewers)
print("\nRelease Year = ",year)

```

DATASET 2

```

Movie = ['Fast X', 'The Kerala Story', 'Dhoom 2', 'Dhoom 3', 'Jurassic World', 'Bhootnath', 'Sita Raman', 'Avenger', 'Student of the Year', 'Drishyam', 'Dangal', 'Race 3', 'Golmaal']

```

```

Director = {'Louis Leterrier', 'Nandini Thorat', 'Akshit Dhake', 'Divya Gatkhal', 'Dheeraj Singh', 'Rahul Jagtap', 'Leela Jain', 'Bhumika Sejwal', 'Viraj Patel', 'Girish Rajput', 'Manoj Singh', 'Amir Khan', 'Aditi Kharche', 'Jasmine Goni'}

```

```

Genres = ['Action', 'Inspired', 'Drama', 'Comedy', 'Comedy', 'Drama', 'Comedy', 'Drama', 'Action', 'Comedy', 'drama', 'Inspired', 'Action', 'Comedy']

```

```

Viewers = { 'Fast X': 3.5, 'The Kerala Story': 2.17, 'Dhoom 2': 1.55, 'Dhoom 3': 2.3, 'Jurassic World': 1.41, 'Bhootnath': 3.07, 'Sita Raman': 3.41, 'Avenger': 1.11, 'Student of the Year': 2.41, 'Drishyam': 2.61, 'Dangal': 1.12, 'Race 3': 1.01, 'Golmaal': 2.63}

```

```

Release Year = (2023, 2023, 2018, 2017, 2019, 2015, 2015, 2022, 2022, 2020, 2021, 2014, 2013, 2012)

```