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DIV: F (F1)

# ASSIGNMENT 2

1.READ CSV INTO PYTHON DATA STRUCTURE

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| Product\_details=[]  Supplier\_details=dict() Customer\_details=[] gender={}  fp1=open("/content/sample\_data/sales1.csv","r") data=fp1.readline()  while(True):  data=fp1.readline() if not data: break; #print(data) 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]})    fp1.close()    Customer\_details=tuple(Customer\_details) print(type(Customer\_details))    print("\nProduct\_details\n",Product\_details,end="") print("\n\nCustomer\_deatils\n",Customer\_details,end="") print("\n\nSupplier\_details\n",Supplier\_details,end="") print("\n\nGender\_details\n",gender,end="") |

OUTPUT:

<class 'tuple'>

Product\_details

['Lenovo Laptop', 'Samsung M31', 'Realmi 10PRO', 'Oppo F21', 'Lenovo

Laptop', 'Samsung M31', 'LG TV 32\*', 'Oppo F21', 'Lenovo Laptop', 'Samsung

M31', 'LG TV 32\*', 'Lenovo Laptop', 'Samsung M31', 'Realmi 10PRO', 'Lenovo

Laptop', 'Oppo F21', 'LG TV 32\*', 'Lenovo Laptop', 'Samsung M31', 'LG TV 32\*']

Customer\_deatils

('Kaustubh Mahajan', 'Siddhi Kiwale', 'Sanket Kandalkar', 'Yash Mali',

'Yash Bagul', '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 Ele.', 'P00002': 'Vijay Sales', 'P00003': 'Gada Ele.',

'P00004': 'Surya Ele.', 'P00005': 'Raka Ele.', 'P00006': 'Gada Ele.',

'P00007': 'Vijay Sales', 'P00008': 'Surya Ele.', 'P00009': 'Raka Ele.',

'P00010': 'Gada Ele.', 'P00011': 'Surya Ele.', 'P00012': 'Raka Ele.',

'P00013': 'Surya Ele.', 'P00014': 'Raka Ele.', 'P00015': 'Gada Ele.',

'P00016': 'Vijay Sales', 'P00017': 'Deshmukh sales', 'P00018': 'Raka

Ele.', 'P00019': 'Deshmukh sales', 'P00020': 'Gada Ele.'}

|  |  |
| --- | --- |
| Gender\_details |  |
| {'Kaustubh Mahajan': 'Male', 'Siddhi Kiwale': 'Female', 'Sanket | |

Kandalkar': 'Male', 'Yash Mali': 'Male', 'Yash Bagul': 'Male', 'Tanuja

Mali': 'Female'}

1. FIND THE MOST POPULAR PRODUCT FOR SALES

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| frequency={} #{Lenovo Laptop:3} # iterating over the list for item in Product\_details:  #checking the element in dictionary if item in frequency: #incrementing the counter frequency[item] +=1 else:  #initializing the count frequency[item]=1 #printing the frequency 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],"times")

OUTPUT:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| {'Lenovo Laptop': 6, 'Samsung M31': 5, 'Realmi 10PRO': 2, 'Oppo F21': 3, | | | | |
| 'LG TV 32\*': 4} |  | | | |
| {'Lenovo Laptop': 6, 'Samsung M31': 5, 'LG TV 32\*': 4, 'Oppo F21': 3, | | | |  |
| 'Realmi 10PRO': 2} | |  | |
| The most popular product for sales Lenovo Laptop sold 6 times | | |  |

1. FIND THE BEST SUPPLIER FOR SALES

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| frequency={}  # iterating over the list for item in Supplier\_details.values(): #checking the element in dictionary if item in frequency: #incrementing the counter frequency[item] +=1 else:  #initializing the count frequency[item]=1 #printing the frequency 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],"Items") |

OUTPUT:

|  |  |  |
| --- | --- | --- |
| {'Raka Ele.': 6, 'Vijay Sales': 3, 'Gada Ele.': 5, 'Surya Ele.': 4, | | |
| 'Deshmukh sales': 2} |  | |
| {'Raka Ele.': 6, 'Gada Ele.': 5, 'Surya Ele.': 4, 'Vijay Sales': 3, | | |
| 'Deshmukh sales': 2} |  | |
| The most popular product for sales Raka Ele. sold 6 Items | |  |

1. FIND THE CUSTOMER WHO BUYS MOST OF THE PRODUCTS

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| --- |
| frequency={}  # iterating over the list for item in Customer\_details:  #checking the element in dictionary if item in frequency: #incrementing the counter frequency[item] +=1 else:  #initializing the count frequency[item]=1 #printing the frequency print("Frequency is as 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 below:

{'Kaustubh Mahajan': 5, 'Siddhi Kiwale': 5, 'Sanket Kandalkar': 4, 'Yash Mali': 4, 'Yash Bagul': 1, 'Tanuja Mali': 1}

Sorted dict is as below:

{'Kaustubh Mahajan': 5, 'Siddhi Kiwale': 5, 'Sanket Kandalkar': 4, 'Yash Mali': 4, 'Yash Bagul': 1, 'Tanuja Mali': 1}

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

1. FIND THE NUMBER OF CUSTOMER WHO ARE ‘FEMALE’

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| --- |
| # Identify Unique Customer 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=male+1 if gender[name]=="Female":  female+=1 print("Total no of Male=",male) print("Total no of Female=",female) |

OUTPUT:

['Kaustubh Mahajan', 'Siddhi Kiwale', 'Sanket Kandalkar', 'Yash Mali', 'Yash Bagul', 'Tanuja Mali'] Total no of Male= 4

Total no of Female= 2