

## Output:-

output= 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 Details: ['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: {'Kaustubh Mahajan': 'Male ', 'Siddhi Kiwale': 'Female ', 'Sanket Kandalkar': 'Male ', 'Yash Mali': 'Male ', 'Yash Bagul': 'Male ', 'Tanuja Mali': 'Female '} Most popular product: Lenovo Laptop Best Supplier: Raka Electronics Customer who buys most number of products: Kaustubh Mahajan Female Customers: 2

```

productct={"Lenovo Laptop":c_lenovo,"Samsung M31":c_sam,"Realmi 10pro":c_realmi,"Oppo F21":c_oppo,"LG TV 32":c_lgtv}
#print(productct)
pcount=sorted(productct.items(), key=lambda item: item[1],reverse=True)
print("Most popular product:",pcount[0][0])

t1=list(Supplier_details.values())

c_sr=t1.count('Raka Ele.')
#print("Products sold by Raka Electronics:",c_sr)

c_sv=t1.count('Vijay Sales')
#print("Products sold by Vijay Sales:",c_sv)

c_sg=t1.count('Gada Ele.')
#print("Products sold by Gada Electronics:",c_sg)

c_ss=t1.count('Surya Ele.')
#print("Products sold by Surya Electronics:",c_ss)

c_sd=t1.count('Deshmukh sales')
#print("Products sold by Deshmukh Sales:",c_sd)

suppct={"Raka Electronics":c_sr,"Vijay Sales":c_sv,"Gada Electronics":c_sg,"Surya Electronics":c_ss,"Deshmukh Sales":c_sd}
scount=sorted(suppct.items(), key=lambda item: item[1],reverse=True)
print("Best Supplier:",scount[0][0])

c_ckm=Customer_details.count('Kaustubh Mahajan')
#print("Products bought by Kaustubh Mahajan:",c_ckm)

c_csk=Customer_details.count('Siddhi Kiwale')
#print("Products bought by Sakshi Kiwale:",c_csk)

c_cskr=Customer_details.count('Sanket Kandalkar')
#print("Products bought by Sanket Kandalkar:",c_cskr)

c_cym=Customer_details.count('Yash Mali')
#print("Products bought by Yash Mali:",c_cym)

c_cyb=Customer_details.count('Yash Bagul')
#print("Products bought by Yash Bagul:",c_cyb)

c_ctm=Customer_details.count('Tanuja Mali')
#print("Products bought by Tanuja Mali:",c_ctm)

custct={"Kaustubh Mahajan":c_ckm,"Sakshi Kiwale":c_csk,"Sanket Kandalkar":c_cskr,"Yash Mali":c_cym,"Yash Bagul":c_cyb,"Tanuja Mali":c_ctm}

```

```

ccount=sorted(custct.items(), key=lambda item: item[1],reverse=True)
print("Customer who buys most number of products:",ccount[0][0])

t2=list(gender.values())
c_fc=t2.count('Female ')

print("Female Customers:",c_fc)

```

```

Product_details = []      #creating empty list for product details
Customer_details = []     #creating empty list for customer details
Supplier_details = dict() #creating empty dictionary for suppliers details
gender={}                 #creating empty set for gender details

fp1=open("Sales.csv","r") #opening file in read mode
data=fp1.readline()       #reading file line by line and storing it in data

while(True):              #if data is present loop will be executed
    data=fp1.readline()
    if not data:           #if data is absent loop will be terminated
        break
    #if data is present loop will be executed
    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]})

#closing the file
fp1.close()

print("Product Details:\n",Product_details,end=" ")
print("\nCustomer Details:\n",Customer_details,end=" ")
print("\nSupplier Details:\n",Supplier_details,end=" ")
print("\nGender:\n",gender,end=" ")
print("\n")

c_lenovo=Product_details.count('Lenovo Laptop')
#print("Lenovo Laptops:",c_lenovo)

c_sam=Product_details.count('Samsung M31')
#print("Samsung M31:",c_sam)

c_realmi=Product_details.count('Realmi 10pro')
#print("Realmi 10pro:",c_realmi)

c_oppo=Product_details.count('Oppo F21')
#print("Oppo F21:",c_oppo)

c_lgtv=Product_details.count('LG TV 32')
#print("LG TV 32:",c_lgtv)

```