

PROGRAM

```
import pandas as pd
df1=pd.read_csv('/content/Sales2 (@).csv')
f1=df1['Product details'].values.tolist()
print(f1)
f2=df1['Supplier Details'].to_dict()
print(f2)
f3=tuple(df1['Customer Details'].tolist())
print(f3)
f4=df1['Product details'].value_counts()
print("The most popular product for sale is:\n",f4)
f5=df1.groupby('Supplier Details')['Product ID'].count()
best_supplier=f5.idxmax()
print("The best supplier for sales is:", best_supplier)
f5=df1.groupby('Customer Details')['Product ID'].count()
top_customer=f5.idxmax()
print("The customer who buys the most products is:", top_customer)
f6=df1[df1['Gender']=='Female']
numfc=len(f6)
print("The number of customers who are 'Female' is:", numfc)
```

OUTPUT

```
['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"']
{0: 'Raka Ele.', 1: 'Vijay Sales', 2: 'Gada Ele.', 3: 'Surya Ele.', 4: 'Raka Ele.', 5: 'Gada Ele.', 6: 'Vijay Sales', 7: 'Surya Ele.', 8: 'Raka Ele.', 9: 'Gada Ele.', 10: 'Surya Ele.', 11: 'Raka Ele.', 12: 'Surya Ele.', 13: 'Raka Ele.', 14: 'Gada Ele.', 15: 'Vijay Sales', 16: 'Deshmukh sales', 17: 'Raka Ele.', 18: 'Deshmukh sales', 19: 'Gada Ele.'}
('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')
The most popular product for sale is:
  Lenovo Laptop      6
  Samsung M31       5
  LG TV 32"         4
  Oppo F21          3
  Realmi 10pro      2
Name: Product details, dtype: int64
The best supplier for sales is: Raka Ele.
The customer who buys the most products is: Kaustubh Mahajan
The number of customers who are 'Female' is: 6
```