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import csv

# Initialize data structures
product_details = []
supplier_details = {}
customer_details = []
female_customers = 0

# Read data from file
with open('/content/Sales1.csv', 'r') as file:
    reader = csv.reader(file)
    next(reader)  # Skip header row

    # Process each row in the file
    for row in reader:
        # Extract data from the row
        product_id, product, supplier, customer, gender = row

        # Store product details in a list
        product_details.append(product)

        # Store supplier details in a dictionary
        if supplier not in supplier_details:
            supplier_details[supplier] = 1
        else:
            supplier_details[supplier] += 1

        # Store customer details in a tuple
        customer_details.append((customer, gender))

        # Count female customers
```

```
        if gender.lower() == 'female':
            female_customers += 1

# Find the most popular product for sale
popular_product = max(set(product_details), key=product_details.count)

# Find the best supplier for sales
best_supplier = max(supplier_details, key=supplier_details.get)

# Find the customer who buys most of the products
customer_purchase_counts = {}
for customer, _ in customer_details:
    if customer not in customer_purchase_counts:
        customer_purchase_counts[customer] = 1
    else:
        customer_purchase_counts[customer] += 1

most_purchases = max(customer_purchase_counts, key=customer_purchase_counts.get)

# Print the results
print("Most popular product for sale:", popular_product)
print("Best supplier for sales:", best_supplier)
print("Customer who buys most products:", most_purchases)
print("Number of female customers:", female_customers)
```

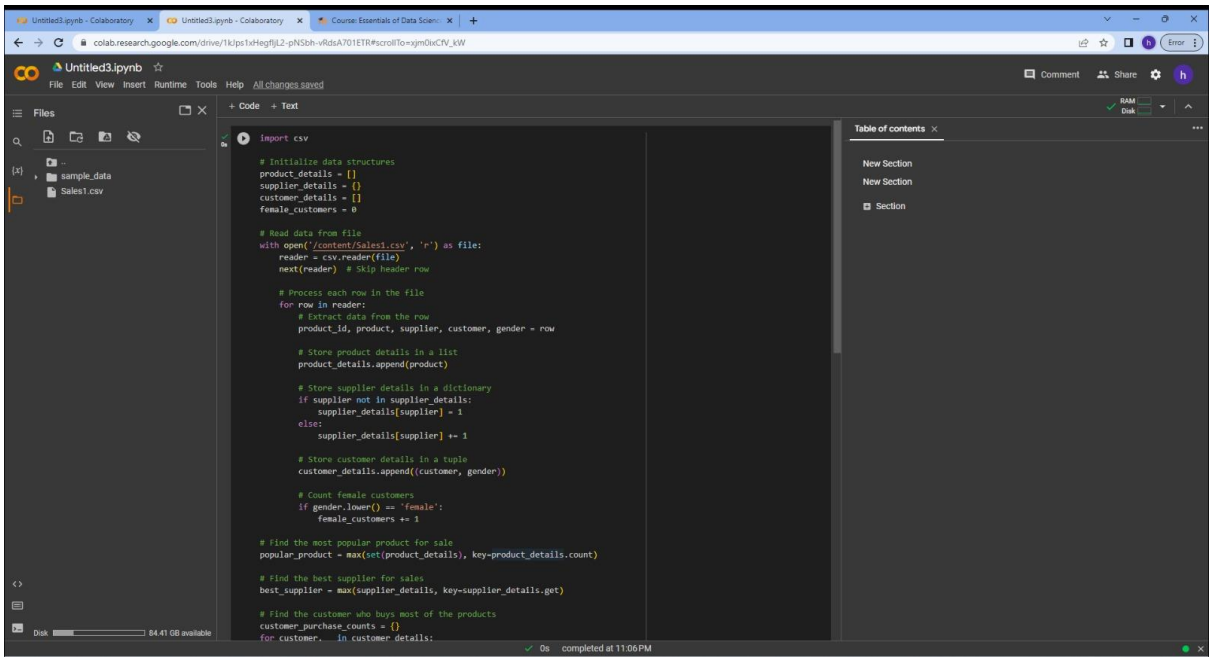
Output

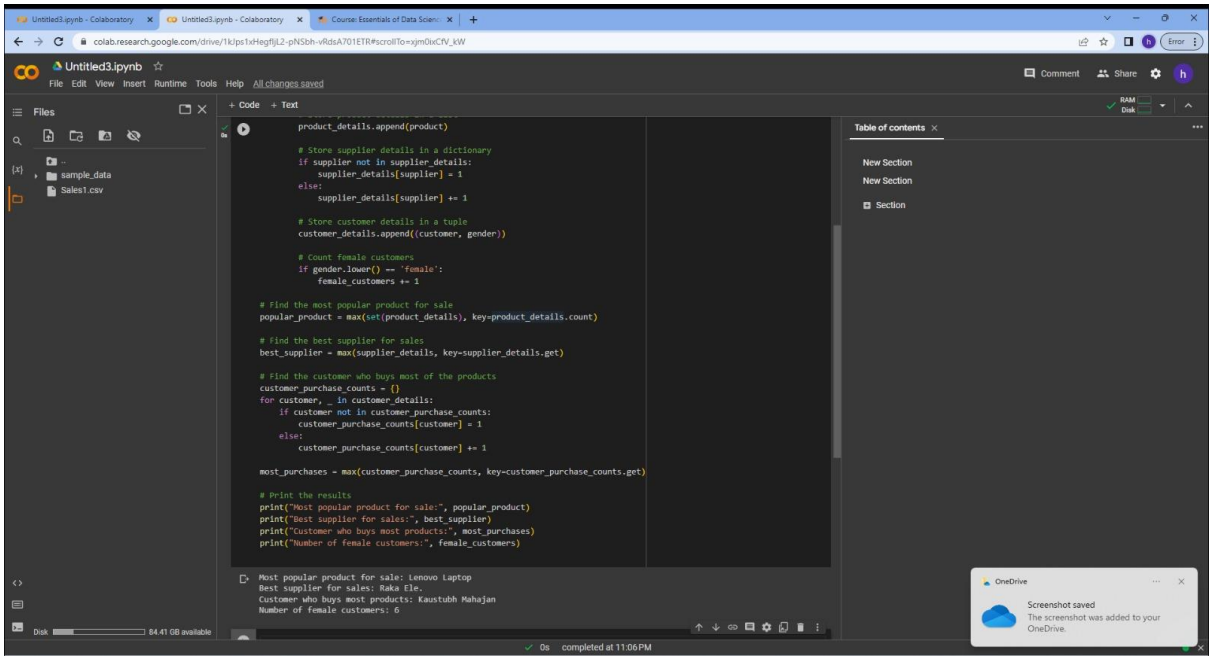
Most popular product for sale: Lenovo Laptop

Best supplier for sales: Raka Ele.

Customer who buys most products: Kaustubh Mahajan

Number of female customers: 6

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product_details.append(product)
# Store supplier details in a dictionary
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supplier_details[supplier] += 1
# Store customer details in a tuple
customer_details.append((customer, gender))
# Count female customers
if gender.lower() == 'female':
female_customers += 1
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popular_product = max(set(product_details), key=product_details.count)
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for customer, _ in customer_details:
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customer_purchase_counts[customer] += 1
most_purchases = max(customer_purchase_counts, key=customer_purchase_counts.get)
# Print the results
print("Most popular product for sale:", popular_product)
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