

File Edit Format Run Options Window Help

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#Q1.Sample sales data.[product_id, price, quantity]
sales_data = [[101, 20, 5],[102, 15, 10],[101, 20, 10],[103, 10, 2],[104, 50, 1],[105, 30, 8],[102, 15, 5],[106, 25, 4],[107, 60, 3],[103, 10, 8]]

#1.Calculate the total revenue generated
total_revenue = 0
for sale in sales_data:
    total_revenue += sale[1] * sale[2]
print(f"Total Revenue Generated: ${total_revenue}")
print()

#2.Calculate the average price per product
total_price = 0
for sale in sales_data:
    total_price += sale[1]
average_price = total_price / len(sales_data)
print(f"Average Price per Product: ${average_price:.2f}")
print()

#3.Find the top 5 best-selling products
product_sales = {}
for sale in sales_data:
    product_id = sale[0]
    quantity = sale[2]
    if product_id in product_sales:
        product_sales[product_id] += quantity
    else:
        product_sales[product_id] = quantity

key=lambda x: x[1], reverse=True
sorted_sales = sorted(product_sales.items(),key)
top_5_products = sorted_sales[:5]
print("Top 5 Best-Selling Products (Product ID: Quantity Sold):", top_5_products)

print()

# 4. Identify products with low sales (less than 10 units)
low_sales_products = []
for product_id, total_quantity in product_sales.items():
    if total_quantity < 10:
        low_sales_products.append(product_id)
print("Products with Low Sales (less than 10 units):", low_sales_products)
```

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Python 3.11.3 (tags/v3.11.3:f3909b8, Apr 4 2023, 23:49:59) [MSC v.1934 64 bit (AMD64)] on win32
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>>>

===== RESTART: C:/Users/kisho/OneDrive/Desktop/Data Science/Python/Asss3.py =====
Total Revenue Generated: \$1195

Average Price per Product: \$25.50

Top 5 Best-Selling Products (Product ID: Quantity Sold): [(101, 15), (102, 15), (103, 10), (105, 8), (106, 4)]

Products with Low Sales (less than 10 units): [104, 105, 106, 107]

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