

M03 Assignment 2 – Bubble Sort – Carissa Perry

Python Code

Step 1: Prompt for number of products

```
num_products = int(input('Enter the number of products: '))
```

Step 2: Collect product prices

```
prices = []

for i in range(num_products):

    price = float(input(f'Enter price for product {i + 1}: '))

    prices.append(price)
```

Step 3: Implement Bubble Sort

```
original_prices = prices.copy()

for i in range(len(prices)):

    for j in range(0, len(prices) - i - 1):

        if prices[j] > prices[j + 1]:

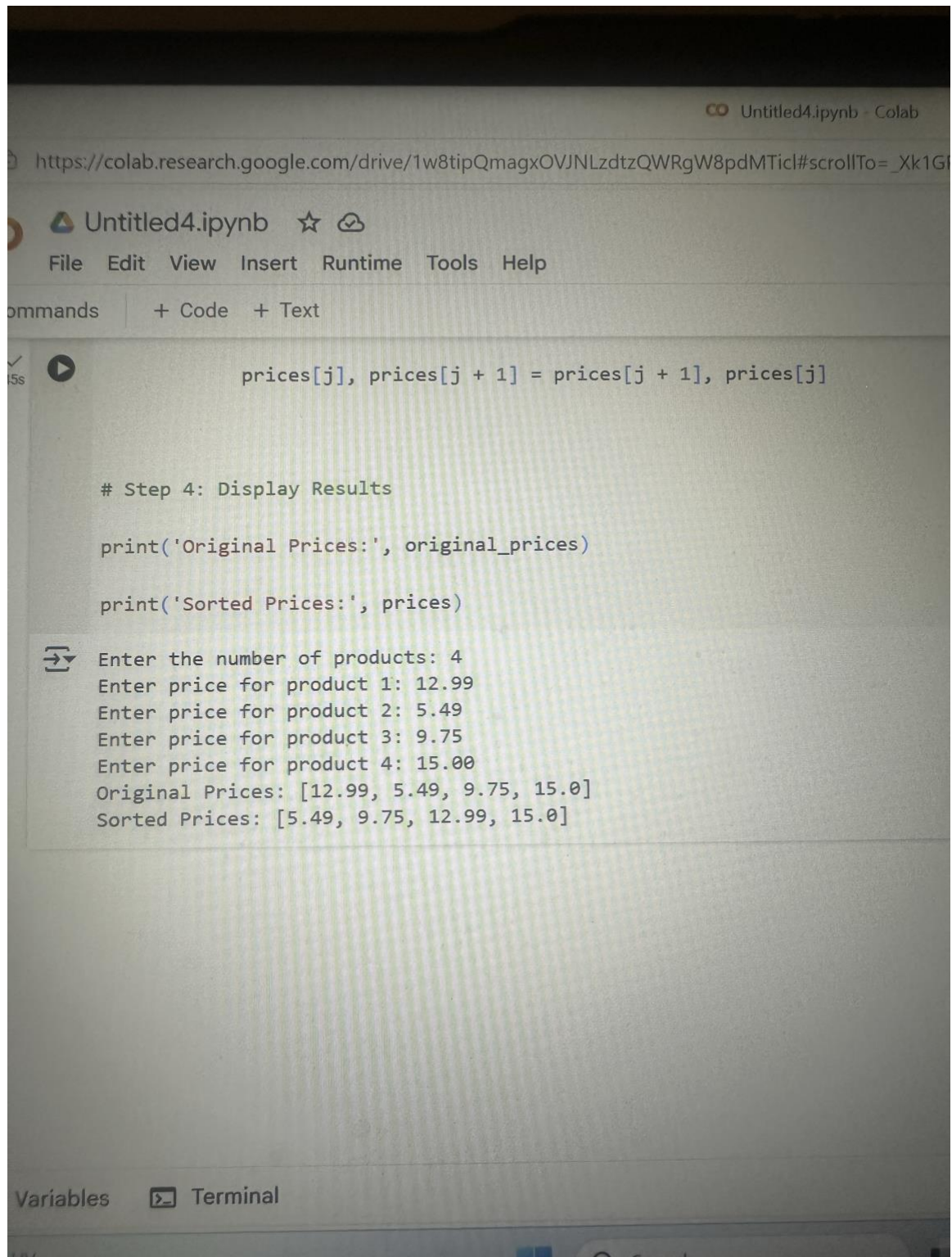
            prices[j], prices[j + 1] = prices[j + 1], prices[j]
```

Step 4: Display Results

```
print('Original Prices:', original_prices)

print('Sorted Prices:', prices)
```

Screenshot of Output



The screenshot shows a Google Colab notebook titled "Untitled4.ipynb". The code in the cell sorts a list of prices. The output shows the original and sorted price lists, followed by a series of prompts for user input and the resulting sorted list.

```
prices[j], prices[j + 1] = prices[j + 1], prices[j]

# Step 4: Display Results

print('Original Prices:', original_prices)

print('Sorted Prices:', prices)
```

Enter the number of products: 4
Enter price for product 1: 12.99
Enter price for product 2: 5.49
Enter price for product 3: 9.75
Enter price for product 4: 15.00
Original Prices: [12.99, 5.49, 9.75, 15.0]
Sorted Prices: [5.49, 9.75, 12.99, 15.0]