SCT_SD_4

TASK 4:

Create a program that extracts information such as name, price and ratings from an online e-commerce website and stores the data in a structured format such as a CSV file.

Source Code: (PYTHON)

```python
from bs4 import BeautifulSoup
import requests
import pandas as pd
import csv

url = "https://webscraper.io/test-sites/e-commerce/allinone/computers/tablets"

# Headers for requests
headers = {
    "User-Agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36
(KHTML, like Gecko) Chrome/133.0.0.0 Safari/537.36",
    "Accept-Language": "en-US,en;q=0.5"
}

# HTTP Request
webpage = requests.get(url, headers=headers)

if webpage.status_code == 200:
    soup = BeautifulSoup(webpage.text, 'html.parser')

    # Extract product information
    products = soup.find_all("div", class_="thumbnail")

    data = []
    for product in products:
        # Extract name
        name = product.find("a", class_="title").text.strip()
```

```python
        # Extract price
        price = product.find("h4", class_="price").text.strip()

        # Extract reviews
        review = product.find("p", class_="review-count").text.strip()

        # Extract rating (count number of stars)
        stars = len(product.find_all("span", class_="glyphicon glyphicon-star"))

        data.append([name, price, review, stars])

    # Convert to DataFrame
    df = pd.DataFrame(data, columns=["Product Name", "Price", "Reviews", "Rating"])

    # Print the DataFrame
    print(df)

else:
    print(f"Failed to retrieve webpage. Status code: {webpage.status_code}")
# Convert to DataFrame
df = pd.DataFrame(data, columns=["Product Name", "Price", "Reviews", "Rating"])

# Save DataFrame to CSV file
df.to_csv("tablets_data.csv", index=False, encoding="utf-8")

print("Data successfully saved to tablets_data.csv")
```

OUTPUT:

```
● ayushghosh@Ayushs-MacBook-Air ~ % /usr/local/bin/python3 /Users/ayushghosh/Desktop/SCT_SD/SCT_SD_4/SCT_SD_4.py
         Product Name    Price      Reviews  Rating
0       Lenovo IdeaTab   $69.99   7 reviews      0
1       IdeaTab A3500L   $88.99   7 reviews      0
2         Acer Iconia   $96.99   7 reviews      0
3        Galaxy Tab 3   $97.99   2 reviews      0
4      Iconia B1-730H...  $99.99   1 reviews      0
5       Memo Pad HD 7  $101.99  10 reviews      0
6        Asus MeMO Pad  $102.99  14 reviews      0
7        Amazon Kindle  $103.99   3 reviews      0
8        Galaxy Tab 3  $107.99  14 reviews      0
9       IdeaTab A8-50  $121.99  13 reviews      0
10         MeMO Pad 7  $130.99  11 reviews      0
11    IdeaTab A3500-...  $148.99   9 reviews      0
12      IdeaTab S5000  $172.99   8 reviews      0
13       Galaxy Tab 4  $233.99   1 reviews      0
14          Galaxy Tab  $251.99  14 reviews      0
15   MeMo PAD FHD 1...  $320.99   7 reviews      0
16         Galaxy Note  $399.99  12 reviews      0
17         Galaxy Note  $489.99   9 reviews      0
18    iPad Mini Reti...  $537.99   8 reviews      0
19   Galaxy Note 10...  $587.99   6 reviews      0
20       Apple iPad Air  $603.99   7 reviews      0
Data successfully saved to tablets_data.csv
○ ayushghosh@Ayushs-MacBook-Air ~ %
```