# \*Flipkart Product Scraper Documentation\*

\*Objective\*: Scrape product details (name, price, rating) from Flipkart search results using Python.

## \*1. Python Program\*

python

import requests

from bs4 import BeautifulSoup

import pandas as pd

def scrape\_flipkart\_products(keyword):

base\_url = "https://www.flipkart.com/search"

params = {"q": keyword}

headers = {"User-Agent": "Mozilla/5.0"}

try:

response = requests.get(base\_url, params=params, headers=headers)

response.raise\_for\_status()

soup = BeautifulSoup(response.text, 'html.parser')

products = []

for container in soup.find\_all('div', {'class': '\_1AtVbE'}):

name = container.find('div', {'class': '\_4rR01T'}).text if container.find('div', {'class': '\_4rR01T'}) else "N/A"

price = container.find('div', {'class': '\_30jeq3'}).text.replace('₹', '').replace(',', '') if container.find('div', {'class': '\_30jeq3'}) else "N/A"

rating = container.find('div', {'class': '\_3LWZlK'}).text if container.find('div', {'class': '\_3LWZlK'}) else "N/A"

products.append({"Product Name": name, "Price": price, "Rating": rating})

df = pd.DataFrame(products)

df.to\_csv('flipkart\_products.csv', index=False)

return df

except Exception as e:

print(f"Error: {e}")

return pd.DataFrame()

if \_\_name\_\_ == "\_\_main\_\_":

keyword = input("Enter search keyword (e.g., 'laptops'): ")

results = scrape\_flipkart\_products(keyword)

print(results if not results.empty else "No results found."

## \*2. Explanation\*

### \*Key Steps\*

1. \*User Input\*: Accepts a keyword (e.g., "laptops").

2. \*HTTP Request\*: Fetches Flipkart’s search results page using requests.

3. \*HTML Parsing\*: Uses BeautifulSoup to extract:

- \*Product Name\* (class \_4rR01T).

- \*Price\* (class \_30jeq3, cleaned to remove ₹ and commas).

- \*Rating\* (class \_3LWZlK, defaults to "N/A" if missing).

4. \*Data Storage\*: Saves results in a pandas DataFrame and exports to flipkart\_products.csv

## \*3. Sample Output\*

### \*Console Output\*

Enter search keyword (e.g., 'laptops'): laptops

Product Name | Price | Rating

---------------------------------|-------|-------

HP Laptop 15s Ryzen 5 | 37990 | 4.3

ASUS Vivobook 15 Intel i3 | 33990 | 4.2