

Project: Cryptocurrency Scraper

This Python script scrapes cryptocurrency data from CoinMarketCap, including rank, name, symbol, and price, and displays it in a formatted table.

Libraries:

- requests
- BeautifulSoup (bs4)

My Code:

```
1. from bs4 import BeautifulSoup
2. import requests
3.
4. # Simple get request and get the page HTML
5. response = requests.get("https://coinmarketcap.com/")
6. soup = BeautifulSoup(response.text, 'html.parser')
7.
8. # Find all table rows
9. rows = soup.find_all('tr')
10.
11. cryptos = []
12.
13. # Extract crypto data from each row
14. for row in rows:
15.     rank_tag = row.find('p', class_='sc-71024e3e-0')
16.     name_tag = row.find('p', class_='sc-65e7f566-0')
17.     symbol_tag = row.find('p', class_='coin-item-symbol')
18.     price_tag = row.find('span', string=lambda text: text and '$' in text)
19.
20.     if name_tag or symbol_tag:
21.         rank = rank_tag.get_text(strip=True) if rank_tag else "NONE"
22.         name = name_tag.get_text(strip=True) if name_tag else "NONE"
23.         symbol = symbol_tag.get_text(strip=True) if symbol_tag else "NONE"
24.         price = price_tag.get_text(strip=True) if price_tag else "NONE"
25.
26.         if name != "NONE" or symbol != "NONE":
27.             cryptos.append({
28.                 'rank': rank,
29.                 'name': name,
30.                 'symbol': symbol,
31.                 'price': price
32.             })
33.
34. # Print table
35. if cryptos:
36.     print(f"{'Rank':<6} {'Name':<20} {'Symbol':<10} {'Price':<15}")
37.     print("-" * 60)
38.
39.     for crypto in cryptos:
40.         # Shorten long names for better table alignment
41.         if len(crypto['name']) > 20:
42.             name = crypto['name'][:17] + "..."
```

```
43.     else:
44.         name = crypto['name']
45.
46.         print(f"{crypto['rank']}:<6} {name:<20} {crypto['symbol']:<10}
{crypto['price']:<15}")
47.
48. print(f"\nSuccessfully scraped {len(cryptos)} cryptocurrencies!")
49.
```

Sample Output:

Rank	Name	Symbol	Price
=====			
1	Bitcoin	BTC	\$27,000
2	Ethereum	ETH	\$1,800
...			
Successfully scraped (n) cryptocurrencies!			

How it works on my machine:

```
D:\Self Learning\Courses\Collage\ADV Task\WebScraping> (myenv) λ python scrape.py
Rank      Name          Symbol      Price
=====      ======        ======      =====
          CoinMarketCap 20 ... CMC20      $191.66
1         Bitcoin       BTC          $90,271.65
2         Ethereum      ETH          $3,114.24
3         Tether         USDT         $0.9998
4         XRP            XRP          $2.05
5         BNB            BNB          $886.06
6         USDC           USDC         $0.9998
7         Solana          SOL          $132.76
8         TRON            TRX          $0.2809
9         Dogecoin        DOGE         $0.1403
10        Cardano         ADA          $0.4258
11        Bitcoin Cash    BCH          $571.46
12        Chainlink       LINK         $13.74
13        Hyperliquid    HYPE         $27.95
14        UNUS SED LEO    LEO          $9.50
15        Iota             IOTA         $0.0001
16        Neo              NEO         $0.0001
17        Stellar          XLM          $0.0001
18        EOS              EOS          $0.0001
19        Tron             TRON         $0.0001
20        Zcash            ZEC          $0.0001

Successfully scraped 15 cryptocurrencies!
```



All Code referenced in this document can be found in my repository:

<https://github.com/Basem3sam/crypto-scrapers>

