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BS(CS)-5A

## Web Scraping Project

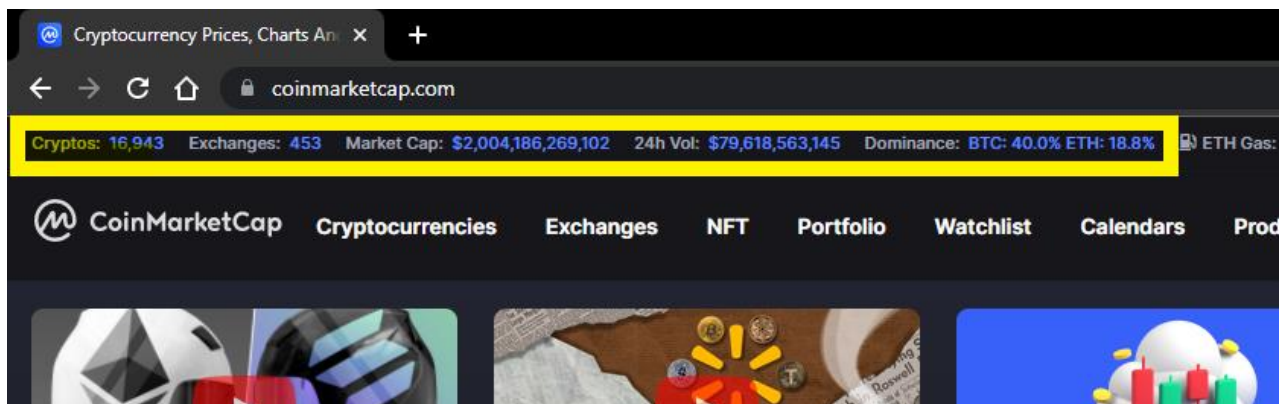
Website: <https://coinmarketcap.com/>









Tools:

- Python
- BeautifulSoup

### Objective:

To scrap most important data of crypto market along with Name, Price, Market Capital of top 10 cryptocurrencies.



Name	Price	24h %	7d %	Market Cap 
 Bitcoin BTC <a href="#">Buy</a>	\$42,329.58	<span>▲ 1.42%</span>	<span>▼ 0.89%</span>	\$801,441,766,418
 Ethereum ETH <a href="#">Buy</a>	\$3,162.54	<span>▼ 0.08%</span>	<span>▼ 2.20%</span>	\$377,024,720,065
 Tether USDT <a href="#">Buy</a>	\$1.00	<span>▲ 0.00%</span>	<span>▲ 0.01%</span>	\$78,336,644,654
 BNB BNB <a href="#">Buy</a>	\$469.97	<span>▼ 0.00%</span>	<span>▲ 1.96%</span>	\$77,599,405,891
 Cardano ADA	\$1.49	<span>▼ 2.28%</span>	<span>▲ 25.22%</span>	\$49,823,727,047
 USD Coin USDC	\$1.00	<span>▲ 0.04%</span>	<span>▲ 0.07%</span>	\$45,760,061,415
 Solana SOL <a href="#">Buy</a>	\$140.42	<span>▲ 1.66%</span>	<span>▼ 0.46%</span>	\$44,112,544,478

Output:

```

Cryptos: 16,943
*****
Exchanges: 453
*****
Market Cap: $2,008,235,431,640
*****
24h Vol: $79,284,238,367
*****
Dominance: BTC: 39.9% ETH: 18.9%
*****
NAME      Price      Market Cap
Bitcoin   $42,429.87  $803,340,563,953
-----
Ethereum  $3,181.17   $379,246,788,393
-----
Tether    $1.00       $78,367,701,085
-----
BNB       $473.77     $78,227,906,242
-----
Cardano   $1.50       $50,428,433,897
-----
USD Coin  $1.00       $45,761,070,806
-----
Solana    $141.18     $44,350,921,795
-----
XRP       $0.7581     $36,132,329,020
-----
Terra     $80.96      $28,981,899,872
-----
Polkadot  $25.27      $24,958,820,658
-----

```

### Code:

```

from bs4 import BeautifulSoup
import requests

def request(url):

```

```
return requests.get(url)
```

```
def crypto_info_printer(top_information, coin_name, coin_price, market_cap):
```

```
    info = ""
```

```
    for i in range(5):
```

```
        x = top_information[i].text
```

```
        info = info + x + "\n*****\n"
```

```
    info = info + "NAME\t\tPrice\t\t\tMarket Cap\n"
```

```
    for i in range(9, 19):
```

```
        x = coin_name[i].text
```

```
        info = info + x + "    "
```

```
        y = coin_price[i - 6].text
```

```
        info = info + y + "    "
```

```
        z = market_cap[i-9].text
```

```
        info = info + z + "    "
```

```
        info = info + "\n-----\n"
```

```
    print(info)
```

```
def soup_lxml(text):
```

```
    return BeautifulSoup(text, 'lxml')
```

```
def crypto_info(url):
```

```

    response = request(url)      # request url, in this case
    'https://coinmarketcap.com/'

    html_text = response.text    # html text of that request


    soup = soup_lxml(html_text)    # convert html text to lxml format


    # Required Data from website

    top_information = soup.find_all('span', class_='sc-2bz68i-0 cVPJov')
    coin_name = soup.find_all(class_='sc-1eb5slv-0 iworPT')
    coin_price = soup.find_all(class_='sc-131di3y-0')
    market_cap = soup.find_all(class_='sc-1ow4cwt-1 ieFnWP')


    crypto_info_printer(top_information, coin_name, coin_price, market_cap)


if __name__ == '__main__':
    url = 'https://coinmarketcap.com/'
    crypto_info(url)

```