

1-basic-concepts

February 2, 2024

1 Python Programming (Basic-Intermediate)

1.1 Module 1 - Basic Concepts

1.2 Understanding Google CoLab

```
[1]: print("Hello World!")
```

Hello World!

```
[2]: 1+1
```

```
[2]: 2
```

```
[3]: x = 1
     y = x + 1
     print(x, y)
```

1 2

```
[4]: !ls /content
```

sample_data

```
[5]: f = open('test.txt', 'w')
     f.write('Hello World!')
     f.close()
```

```
[6]: from google.colab import drive
     drive.mount('/content/drive')
```

Mounted at /content/drive

```
[12]: import pandas as pd
      df = pd.read_csv('/content/drive/MyDrive/AIS_DG/Flight_flights.csv')
      df.head()
```

```
[12]: Unnamed: 0  year  month  day  dep_time  sched_dep_time  dep_delay  \
0          1  2013    1    1    517.0          515          2.0
1          2  2013    1    1    533.0          529          4.0
2          3  2013    1    1    542.0          540          2.0
3          4  2013    1    1    544.0          545         -1.0
4          5  2013    1    1    554.0          600         -6.0

      arr_time  sched_arr_time  arr_delay carrier  flight tailnum origin dest  \
0      830.0           819        11.0     UA    1545  N14228   EWR  IAH
1      850.0           830        20.0     UA    1714  N24211   LGA  IAH
2      923.0           850        33.0     AA    1141  N619AA   JFK  MIA
3     1004.0          1022       -18.0     B6     725  N804JB   JFK  BQN
4      812.0           837       -25.0     DL     461  N668DN   LGA  ATL

      air_time  distance  hour  minute  time_hour
0      227.0      1400     5      15  2013-01-01 05:00:00
1      227.0      1416     5      29  2013-01-01 05:00:00
2      160.0      1089     5      40  2013-01-01 05:00:00
3      183.0      1576     5      45  2013-01-01 05:00:00
4      116.0       762     6       0  2013-01-01 06:00:00
```

```
[9]: !pip show pandas
```

```
Name: pandas
Version: 1.5.3
Summary: Powerful data structures for data analysis, time series, and statistics
Home-page: https://pandas.pydata.org
Author: The Pandas Development Team
Author-email: pandas-dev@python.org
License: BSD-3-Clause
Location: /usr/local/lib/python3.10/dist-packages
Requires: numpy, python-dateutil, pytz
Required-by: altair, arviz, bigframes, bokeh, bqplot, cmdstanpy, cufflinks,
datascience, db-dtypes, dopamine-rl, fastai, geemap, geopandas, google-colab,
gsread-dataframe, holoviews, ibis-framework, lida, mizani, mlxtend, pandas-
datareader, pandas-gbq, panel, pins, plotnine, prophet, pymc, seaborn, sklearn-
pandas, statsmodels, vega-datasets, xarray, yfinance
```

```
[10]: !ls /usr/local/lib/python3.9/dist-packages/
```

```
ls: cannot access '/usr/local/lib/python3.9/dist-packages/': No such file or
directory
```

```
[11]: !pip install scikit-surprise
```

```
Collecting scikit-surprise
  Downloading scikit-surprise-1.1.3.tar.gz (771 kB)
```

772.0/772.0

kB 4.3 MB/s eta 0:00:00

```
Preparing metadata (setup.py) ... done
Requirement already satisfied: joblib>=1.0.0 in /usr/local/lib/python3.10/dist-packages (from scikit-surprise) (1.3.2)
Requirement already satisfied: numpy>=1.17.3 in /usr/local/lib/python3.10/dist-packages (from scikit-surprise) (1.23.5)
Requirement already satisfied: scipy>=1.3.2 in /usr/local/lib/python3.10/dist-packages (from scikit-surprise) (1.11.4)
Building wheels for collected packages: scikit-surprise
  Building wheel for scikit-surprise (setup.py) ... done
  Created wheel for scikit-surprise:
    filename=scikit_surprise-1.1.3-cp310-cp310-linux_x86_64.whl size=3162682
    sha256=158d8b1536cce64b4dd20c0876daabbe44cbe0c75897abfdce2dfe641e2213c3
    Stored in directory: /root/.cache/pip/wheels/a5/ca/a8/4e28def53797fdc4363ca4af740db15a9c2f1595ebc51fb445
Successfully built scikit-surprise
Installing collected packages: scikit-surprise
Successfully installed scikit-surprise-1.1.3
```

```
[13]: %%writefile /content/drive/MyDrive/AIS_DG/lib/mymodule.py
```

```
def MyFunction():
    print ('My imported function')
```

Overwriting /content/drive/MyDrive/AIS_DG/lib/mymodule.py

```
[14]: !ls /content/drive/MyDrive/AIS_DG/lib
```

car.py mymodule1.py mymodule.py __pycache__

```
[15]: import sys
sys.path.append('/content/drive/MyDrive/AIS_DG/lib')
```

```
[16]: import mymodule
```

```
[17]: import mymodule
mymodule.MyFunction()
```

My imported function

1.3 Basic syntax and data types

1.4 1. Markdown

Markdown is a lightweight markup language with simple formatting syntax. It can be used to annotate your notebook to explain or discuss the concepts/codes that you try to communicate.

Markdown mode can be selected from the toolbar, or use keyboard shortcut “M” when the cell is selected.

In this section, try run the markdown text below

2 Hello World

2.1 Section

2.1.1 Sub-Section

This is a normal text with underline. 1. First line 2. Second line

Python is fun

Test *123*

2.2 2. Code

```
[18]: 1+1
```

```
[18]: 2
```

```
[19]: "Hello World"
```

```
[19]: 'Hello World'
```

2.3 3. Assigning values to variable

```
[20]: counter = 100      # An integer assignment
      miles = 1000.0    # A floating point
      name = "John"     # A string

      print(counter)
      print(miles)
      print(name)
```

```
100
```

```
1000.0
```

```
John
```

```
[21]: pprint = print
```

```
[22]: pprint(1,2,3)
```

```
1 2 3
```

```
[23]: a = b = c = 1
      print(a,b,c)
```

1 1 1

```
[24]: a, b, c = 1, 2, "John"
      print('Formatted text: %d, %d, %s'%(a,b,c))
```

Formatted text: 1, 2, John

```
[25]: 1, 2
```

```
[25]: (1, 2)
```

```
[26]: a = 1,2,3,4,5
```

```
[27]: a
```

```
[27]: (1, 2, 3, 4, 5)
```

```
[28]: a, b = 1,2,3,4,5
      a
```

```
-----
ValueError                                Traceback (most recent call last)
<ipython-input-28-1a842d05aa60> in <cell line: 1>()
----> 1 a, b = 1,2,3,4,5
      2 a

ValueError: too many values to unpack (expected 2)
```

2.4 4. Variables in cells

```
[33]: del x
```

```
[29]: x
```

```
[29]: 1
```

```
[30]: x = 1
```

```
[31]: x + 1
```

```
[31]: 2
```

```
[32]: x
```

```
[32]: 1
```

2.5 5. Error! Why?

```
[34]: x = (1,2,3)
```

```
[35]: x[0]
```

```
[35]: 1
```

```
[36]: x + 1
```

```
-----  
TypeError                                Traceback (most recent call last)  
<ipython-input-36-eaf7b6991020> in <cell line: 1>()  
----> 1 x + 1  
  
TypeError: can only concatenate tuple (not "int") to tuple
```

2.6 6. Comments

A better way to explain

```
[37]: # This is a comment  
x = 1 # This is a second comment  
text = "Hello World! # This is not a comment"  
print(text)
```

```
Hello World! # This is not a comment
```

2.7 Challenge: multiple assignment

Perform multiple assignment of a, b, and c to 'Hello', 0, 'World!', respectively. Replace in the code blank ____ with the actual code to complete the code.

```
[39]: a, b, c = 'Hello',0,'World!' # work here  
a, b, c
```

```
[39]: ('Hello', 0, 'World!')
```

2.8 7. Number

```
[40]: x = 1.1  
y = 10
```

```
[41]: type(y)
```

```
[41]: int
```

```
[42]: dir()
```

```
[42]: ['In',  
      'Out',  
      '_',  
      '_12',  
      '_18',  
      '_19',  
      '_2',  
      '_25',  
      '_27',  
      '_29',  
      '_31',  
      '_32',  
      '_35',  
      '_39',  
      '_41',  
      '__',  
      '___',  
      '__builtin__',  
      '__builtins__',  
      '__doc__',  
      '__loader__',  
      '__name__',  
      '__package__',  
      '__spec__',  
      '_dh',  
      '_exit_code',  
      '_i',  
      '_i1',  
      '_i10',  
      '_i11',  
      '_i12',  
      '_i13',  
      '_i14',  
      '_i15',  
      '_i16',  
      '_i17',  
      '_i18',  
      '_i19',  
      '_i2',  
      '_i20',  
      '_i21',  
      '_i22',  
      '_i23',  
      '_i24',  
      '_i25',
```

```
'_i26',  
'_i27',  
'_i28',  
'_i29',  
'_i3',  
'_i30',  
'_i31',  
'_i32',  
'_i33',  
'_i34',  
'_i35',  
'_i36',  
'_i37',  
'_i38',  
'_i39',  
'_i4',  
'_i40',  
'_i41',  
'_i42',  
'_i5',  
'_i6',  
'_i7',  
'_i8',  
'_i9',  
'_ih',  
'_ii',  
'_iii',  
'_oh',  
'a',  
'b',  
'c',  
'counter',  
'df',  
'drive',  
'exit',  
'f',  
'get_ipython',  
'miles',  
'mymodule',  
'name',  
'pd',  
'pprint',  
'quit',  
'sys',  
'text',  
'x',  
'y']
```



```
[43]: del a
```

```
[44]: dir()
```

```
[44]: ['In',  
      'Out',  
      '_',  
      '_12',  
      '_18',  
      '_19',  
      '_2',  
      '_25',  
      '_27',  
      '_29',  
      '_31',  
      '_32',  
      '_35',  
      '_39',  
      '_41',  
      '_42',  
      '__',  
      '___',  
      '__builtin__',  
      '__builtins__',  
      '__doc__',  
      '__loader__',  
      '__name__',  
      '__package__',  
      '__spec__',  
      '_dh',  
      '_exit_code',  
      '_i',  
      '_i1',  
      '_i10',  
      '_i11',  
      '_i12',  
      '_i13',  
      '_i14',  
      '_i15',  
      '_i16',  
      '_i17',  
      '_i18',  
      '_i19',  
      '_i2',  
      '_i20',  
      '_i21',  
      '_i22',
```

```
'_i23',  
'_i24',  
'_i25',  
'_i26',  
'_i27',  
'_i28',  
'_i29',  
'_i3',  
'_i30',  
'_i31',  
'_i32',  
'_i33',  
'_i34',  
'_i35',  
'_i36',  
'_i37',  
'_i38',  
'_i39',  
'_i4',  
'_i40',  
'_i41',  
'_i42',  
'_i43',  
'_i44',  
'_i5',  
'_i6',  
'_i7',  
'_i8',  
'_i9',  
'_ih',  
'_ii',  
'_iii',  
'_oh',  
'b',  
'c',  
'counter',  
'df',  
'drive',  
'exit',  
'f',  
'get_ipython',  
'miles',  
'mymodule',  
'name',  
'pd',  
'pprint',  
'quit',
```

```
'sys',  
'text',  
'x',  
'y']
```

[46]: a

```
-----  
NameError                                Traceback (most recent call last)  
<ipython-input-46-3f786850e387> in <cell line: 1>()  
----> 1 a  
  
NameError: name 'a' is not defined
```

[47]: del b,c

2.9 Challenge: delete c

Delete the variable c.

[90]: c = 5
del c

[91]: c

```
-----  
NameError                                Traceback (most recent call last)  
<ipython-input-91-2b66fd261ee5> in <cell line: 1>()  
----> 1 c  
  
NameError: name 'c' is not defined
```

[53]: x = 1

[54]: type(x)

[54]: int

[55]: y = 0.0

[56]: type(y)

[56]: float

[57]: type(1+2j)

```
[57]: complex
```

```
[58]: 2+2
```

```
[58]: 4
```

```
[59]: 2/2
```

```
[59]: 1.0
```

```
[60]: 5 % 2
```

```
[60]: 1
```

```
[61]: 2**3
```

```
[61]: 8
```

2.10 8. String subsetting

```
[62]: s = 'Hello World!'
      print(s)
```

```
Hello World!
```

```
[63]: print(s[0])      # Prints first character of the string
```

```
H
```

```
[64]: print(s[2:5])    # Prints characters starting index 2, not more than 5
```

```
llo
```

```
[65]: print(s[2:])     # Prints string starting from 3rd character
```

```
llo World!
```

```
[66]: print(s[-2:])
```

```
d!
```

```
[67]: print(s * 2)     # Prints string two times
```

```
Hello World!Hello World!
```

```
[68]: print(s + "TEST") # Prints concatenated string
```

```
Hello World!TEST
```

2.11 Challenge: subset the string

Print the string “I love Python” by subsetting str1, str2 and str3.

```
[69]: str1 = "Python Programming"
      str2 = "You and I"
      str3 = "What love is"
      str_res = str2[-1] + str3[4:10] + str1[:6] # work here
      print(str_res)
```

I love Python

```
[70]: brand = 'Honda'
      model = 'Accord'
      year = '2018'
      f'Car: {brand} {model} {year}'
```

```
[70]: 'Car: Honda Accord 2018'
```

2.12 9. List subsetting

```
[71]: longlist = [ 'abcd', 786 , 2.23, 'john', 70.2 ]
      tinylist = [123, 'john']

      print(longlist)           # Prints complete list
```

['abcd', 786, 2.23, 'john', 70.2]

```
[72]: print(longlist[0])       # Prints first element of the list
```

abcd

```
[73]: print(longlist[1:3])     # Prints elements starting from 2nd till 3rd
```

[786, 2.23]

```
[74]: print(longlist[2:])      # Prints elements starting from 3rd element
```

[2.23, 'john', 70.2]

```
[75]: longlist[-1]
```

```
[75]: 70.2
```

```
[76]: print(tinylist * 2)      # Prints list two times
```

[123, 'john', 123, 'john']

```
[77]: print(longlist + tinylist) # Prints concatenated lists
```

```
['abcd', 786, 2.23, 'john', 70.2, 123, 'john']
```

```
[78]: A = [[1,2],[3,4]]  
A
```

```
[78]: [[1, 2], [3, 4]]
```

```
[79]: [0, [1, 2, 3, [4, 5]]]
```

```
[79]: [0, [1, 2, 3, [4, 5]]]
```

```
[80]: A + [5]
```

```
[80]: [[1, 2], [3, 4], 5]
```

```
[81]: B = []
```

```
[82]: B
```

```
[82]: []
```

```
[83]: x = list()
```

```
[84]: x.append([1])
```

```
[85]: x
```

```
[85]: [[1]]
```

```
[86]: # x = x + [2]  
x += [2]
```

```
[86]:
```

```
[87]: x.count(2)
```

```
[87]: 1
```

2.13 Challenge: list operation

Use the following variables x, y, and z to combine to get the final list.

```
[1, 2, 3, 4, 5, 6, 7, 8]
```

```
[88]: x = [1, 2, 3, 4]  
y = 5  
z = [6, 7, [8]]
```

```
[89]: # work here
      x + [y] + z[:2] + z[-1]
```

```
[89]: [1, 2, 3, 4, 5, 6, 7, 8]
```

2.14 10. Tuple subsetting

```
[92]: longtuple = ( 'abcd', 786 , 2.23, 'john', 70.2 )
      tinytuple = (123, 'john')

      print(longtuple)           # Prints complete list
```

```
('abcd', 786, 2.23, 'john', 70.2)
```

```
[93]: print(longtuple[0])        # Prints first element of the list
```

```
abcd
```

```
[94]: print(longtuple[1:3])      # Prints elements starting from 2nd till 3rd
```

```
(786, 2.23)
```

```
[95]: print(longtuple[2:])      # Prints elements starting from 3rd element
```

```
(2.23, 'john', 70.2)
```

```
[96]: print(tinytuple * 2)      # Prints list two times
```

```
(123, 'john', 123, 'john')
```

```
[97]: print(longtuple + tinytuple) # Prints concatenated lists
```

```
('abcd', 786, 2.23, 'john', 70.2, 123, 'john')
```

```
[98]: longtuple + tinylist
```

```
-----
TypeError                                Traceback (most recent call last)
<ipython-input-98-d7139a8af3c9> in <cell line: 1>()
----> 1 longtuple + tinylist

TypeError: can only concatenate tuple (not "list") to tuple
```

2.15 11. Invalid tuple

```
[99]: x = ( 'abcd', 786 , 2.23, 'john', 70.2 )
      y = [ 'abcd', 786 , 2.23, 'john', 70.2 ]
      x[2] = 1000      # Invalid syntax with tuple
```

```
-----
TypeError                                Traceback (most recent call last)
<ipython-input-99-95c07df17f02> in <cell line: 3>()
      1 x = ( 'abcd', 786 , 2.23, 'john', 70.2 )
      2 y = [ 'abcd', 786 , 2.23, 'john', 70.2 ]
----> 3 x[2] = 1000      # Invalid syntax with tuple

TypeError: 'tuple' object does not support item assignment
```

```
[100]: y[2] = 1000      # Valid syntax with list
      print(x)
      print(y)
```

```
('abcd', 786, 2.23, 'john', 70.2)
['abcd', 786, 1000, 'john', 70.2]
```

2.16 12. Dictionary operations

```
[101]: d = {} #dict
      d1 = dict()
      d['one'] = "This is one"
      d[2]      = "This is two"

      tinydict = {'name': 'john', 'code':6734, 'dept': 'sales'}
```

```
[102]: d
```

```
[102]: {'one': 'This is one', 2: 'This is two'}
```

```
[103]: print(d['one'])      # Prints value for 'one' key
```

```
This is one
```

```
[104]: print(d[2])      # Prints value for 2 key
```

```
This is two
```

```
[105]: print(tinydict)      # Prints complete dictionary
```

```
{'name': 'john', 'code': 6734, 'dept': 'sales'}
```



```
[106]: print(tinydict.keys())    # Prints all the keys
```

```
dict_keys(['name', 'code', 'dept'])
```

```
[107]: print(tinydict.values()) # Prints all the values
```

```
dict_values(['john', 6734, 'sales'])
```

```
[108]: x = dict()
```

2.17 13. Comparison

```
[109]: True
```

```
[109]: True
```

```
[110]: False
```

```
[110]: False
```

```
[111]: not True
```

```
[111]: False
```

```
[112]: False or True
```

```
[112]: True
```

```
[113]: False and True
```

```
[113]: False
```

```
[114]: 1 > 1
```

```
[114]: False
```

```
[115]: 1 > "1"
```

```
-----  
TypeError                                Traceback (most recent call last)  
<ipython-input-115-3f7a524c906d> in <cell line: 1>()  
----> 1 1 > "1"  
  
TypeError: '>' not supported between instances of 'int' and 'str'
```

```
[ ]: (2,2,3) > (2,1,4) # partial ordering
```

```
[116]: [3,3] <= [2,2]
```

```
[116]: False
```

```
[117]: 1 > 2 or 3 > 2
```

```
[117]: True
```

```
[118]: 1 < 2 < 3
```

```
[118]: True
```

2.18 14. Type conversion

```
[119]: x = "Hello"  
y = 123  
print(x+str(y))
```

```
Hello123
```

```
[120]: print(list(x))
```

```
['H', 'e', 'l', 'l', 'o']
```

```
[ ]: tuple([y])
```

2.19 Challenge: dictionary

Create a dictionary with the following information and print the key and value THB: Thai Baht
GBP: Great British Pound JPY: Japanese Yen

```
[121]: # Work on the challenge in this area  
unit = {'THB': 'Thai Baht',  
        'GBP': 'Great British Pound',  
        'JPY': 'Japanese Yen'}  
unit['THB']
```

```
[121]: 'Thai Baht'
```

2.20 Activity: Using web API to obtain data

In this activity, we will use the package **requests** to get the API response. The package can be used after importing it to the current kernel by using the command “**import requests**”. After obtaining the response (JSON format, Python Dictionary), write your code to answer the following questions

```
[122]:
```

```
import requests
resp = requests.get('https://api.coingecko.com/api/v3/coins/markets/?
↳vs_currency=usd')
cc_data = resp.json()
print(cc_data)
```

```
[{'id': 'bitcoin', 'symbol': 'btc', 'name': 'Bitcoin', 'image':
'https://assets.coingecko.com/coins/images/1/large/bitcoin.png?1696501400',
'current_price': 42886, 'market_cap': 838368145426, 'market_cap_rank': 1,
'fully_diluted_valuation': 897595286525, 'total_volume': 21822812951,
'high_24h': 43717, 'low_24h': 42410, 'price_change_24h': -684.4704503957328,
'price_change_percentage_24h': -1.57096, 'market_cap_change_24h':
-15717311355.644043, 'market_cap_change_percentage_24h': -1.84025,
'circulating_supply': 19614331.0, 'total_supply': 21000000.0, 'max_supply':
21000000.0, 'ath': 69045, 'ath_change_percentage': -37.24682, 'ath_date':
'2021-11-10T14:24:11.849Z', 'atl': 67.81, 'atl_change_percentage': 63796.81043,
'atl_date': '2013-07-06T00:00:00.000Z', 'roi': None, 'last_updated':
'2024-01-31T20:17:14.678Z'}, {'id': 'ethereum', 'symbol': 'eth', 'name':
'Ethereum', 'image':
'https://assets.coingecko.com/coins/images/279/large/ethereum.png?1696501628',
'current_price': 2302.18, 'market_cap': 275903905958, 'market_cap_rank': 2,
'fully_diluted_valuation': 275903905958, 'total_volume': 10698944994,
'high_24h': 2385.34, 'low_24h': 2282.14, 'price_change_24h': -78.98697655622345,
'price_change_percentage_24h': -3.31715, 'market_cap_change_24h':
-10154839948.63623, 'market_cap_change_percentage_24h': -3.54991,
'circulating_supply': 120182821.049024, 'total_supply': 120182821.049024,
'max_supply': None, 'ath': 4878.26, 'ath_change_percentage': -52.37031,
'ath_date': '2021-11-10T14:24:19.604Z', 'atl': 0.432979,
'atl_change_percentage': 536531.3751, 'atl_date': '2015-10-20T00:00:00.000Z',
'roi': {'times': 70.77166703019178, 'currency': 'btc', 'percentage':
7077.166703019178}, 'last_updated': '2024-01-31T20:17:15.140Z'}, {'id':
'tether', 'symbol': 'usdt', 'name': 'Tether', 'image':
'https://assets.coingecko.com/coins/images/325/large/Tether.png?1696501661',
'current_price': 0.998104, 'market_cap': 95723781277, 'market_cap_rank': 3,
'fully_diluted_valuation': 95723781277, 'total_volume': 40193651300, 'high_24h':
1.002, 'low_24h': 0.99485, 'price_change_24h': -0.002473295713631418,
'price_change_percentage_24h': -0.24719, 'market_cap_change_24h':
-385474498.14645386, 'market_cap_change_percentage_24h': -0.40108,
'circulating_supply': 96219281549.4949, 'total_supply': 96219281549.4949,
'max_supply': None, 'ath': 1.32, 'ath_change_percentage': -24.48271, 'ath_date':
'2018-07-24T00:00:00.000Z', 'atl': 0.572521, 'atl_change_percentage': 74.52037,
'atl_date': '2015-03-02T00:00:00.000Z', 'roi': None, 'last_updated':
'2024-01-31T20:15:17.050Z'}, {'id': 'binancecoin', 'symbol': 'bnb', 'name':
'BNB', 'image': 'https://assets.coingecko.com/coins/images/825/large/bnb-
icon2x.png?1696501970', 'current_price': 302.32, 'market_cap': 46361104492,
'market_cap_rank': 4, 'fully_diluted_valuation': 46361104492, 'total_volume':
652594667, 'high_24h': 310.56, 'low_24h': 300.59, 'price_change_24h':
```

```

-7.86103098899639, 'price_change_percentage_24h': -2.53436,
'market_cap_change_24h': -1347776852.1702728,
'market_cap_change_percentage_24h': -2.825, 'circulating_supply': 153856150.0,
'total_supply': 153856150.0, 'max_supply': 200000000.0, 'ath': 686.31,
'ath_change_percentage': -55.58551, 'ath_date': '2021-05-10T07:24:17.097Z',
'atl': 0.0398177, 'atl_change_percentage': 765437.95283, 'atl_date':
'2017-10-19T00:00:00.000Z', 'roi': None, 'last_updated':
'2024-01-31T20:17:06.148Z'}, {'id': 'solana', 'symbol': 'sol', 'name': 'Solana',
'image':
'https://assets.coingecko.com/coins/images/4128/large/solana.png?1696504756',
'current_price': 99.2, 'market_cap': 43266814955, 'market_cap_rank': 5,
'fully_diluted_valuation': 56436560955, 'total_volume': 3641162032, 'high_24h':
105.45, 'low_24h': 97.8, 'price_change_24h': -5.960725967199352,
'price_change_percentage_24h': -5.66819, 'market_cap_change_24h':
-2611757669.3631363, 'market_cap_change_percentage_24h': -5.69276,
'circulating_supply': 435747756.743262, 'total_supply': 568382449.24628,
'max_supply': None, 'ath': 259.96, 'ath_change_percentage': -61.18572,
'ath_date': '2021-11-06T21:54:35.825Z', 'atl': 0.500801,
'atl_change_percentage': 20047.97524, 'atl_date': '2020-05-11T19:35:23.449Z',
'roi': None, 'last_updated': '2024-01-31T20:17:24.257Z'}, {'id': 'ripple',
'symbol': 'xrp', 'name': 'XRP', 'image':
'https://assets.coingecko.com/coins/images/44/large/xrp-symbol-
white-128.png?1696501442', 'current_price': 0.507667, 'market_cap': 27536942536,
'market_cap_rank': 6, 'fully_diluted_valuation': 50637007829, 'total_volume':
1665333815, 'high_24h': 0.514684, 'low_24h': 0.498261, 'price_change_24h':
-0.007016517481078789, 'price_change_percentage_24h': -1.36327,
'market_cap_change_24h': -427533255.660759, 'market_cap_change_percentage_24h':
-1.52884, 'circulating_supply': 54374512255.0, 'total_supply': 99987956150.0,
'max_supply': 100000000000.0, 'ath': 3.4, 'ath_change_percentage': -84.96847,
'ath_date': '2018-01-07T00:00:00.000Z', 'atl': 0.00268621,
'atl_change_percentage': 18917.121, 'atl_date': '2014-05-22T00:00:00.000Z',
'roi': None, 'last_updated': '2024-01-31T20:17:24.364Z'}, {'id': 'usd-coin',
'symbol': 'usdc', 'name': 'USDC', 'image':
'https://assets.coingecko.com/coins/images/6319/large/usdc.png?1696506694',
'current_price': 0.999113, 'market_cap': 26766583031, 'market_cap_rank': 7,
'fully_diluted_valuation': 25365322676, 'total_volume': 7390834534, 'high_24h':
1.004, 'low_24h': 0.994008, 'price_change_24h': -0.001904053599131261,
'price_change_percentage_24h': -0.19021, 'market_cap_change_24h': 262822552,
'market_cap_change_percentage_24h': 0.99164, 'circulating_supply':
26877872464.183, 'total_supply': 25470785983.8999, 'max_supply': None, 'ath':
1.17, 'ath_change_percentage': -14.65554, 'ath_date':
'2019-05-08T00:40:28.300Z', 'atl': 0.877647, 'atl_change_percentage': 14.03675,
'atl_date': '2023-03-11T08:02:13.981Z', 'roi': None, 'last_updated':
'2024-01-31T20:17:16.440Z'}, {'id': 'staked-ether', 'symbol': 'steth', 'name':
'Lido Staked Ether', 'image': 'https://assets.coingecko.com/coins/images/13442/l
arge/steth_logo.png?1696513206', 'current_price': 2300.3, 'market_cap':
21615952642, 'market_cap_rank': 8, 'fully_diluted_valuation': 21615983099,
'total_volume': 15537795, 'high_24h': 2388.25, 'low_24h': 2282.2,

```

'price_change_24h': -79.4065247267713, 'price_change_percentage_24h': -3.33683,
 'market_cap_change_24h': -771314688.6999855, 'market_cap_change_percentage_24h':
 -3.44533, 'circulating_supply': 9413448.85718321, 'total_supply':
 9413462.12072922, 'max_supply': 9413448.85718321, 'ath': 4829.57,
 'ath_change_percentage': -52.00204, 'ath_date': '2021-11-10T14:40:47.256Z',
 'atl': 482.9, 'atl_change_percentage': 380.04005, 'atl_date':
 '2020-12-22T04:08:21.854Z', 'roi': None, 'last_updated':
 '2024-01-31T20:17:03.555Z'}, {'id': 'cardano', 'symbol': 'ada', 'name':
 'Cardano', 'image':
 'https://assets.coingecko.com/coins/images/975/large/cardano.png?1696502090',
 'current_price': 0.507282, 'market_cap': 17758193556, 'market_cap_rank': 9,
 'fully_diluted_valuation': 22766708338, 'total_volume': 487152935, 'high_24h':
 0.527035, 'low_24h': 0.497703, 'price_change_24h': -0.012504995040216405,
 'price_change_percentage_24h': -2.40579, 'market_cap_change_24h':
 -501923537.3990059, 'market_cap_change_percentage_24h': -2.74874,
 'circulating_supply': 35100318330.6778, 'total_supply': 45000000000.0,
 'max_supply': 45000000000.0, 'ath': 3.09, 'ath_change_percentage': -83.40436,
 'ath_date': '2021-09-02T06:00:10.474Z', 'atl': 0.01925275,
 'atl_change_percentage': 2560.88116, 'atl_date': '2020-03-13T02:22:55.044Z',
 'roi': None, 'last_updated': '2024-01-31T20:17:14.165Z'}, {'id': 'avalanche-2',
 'symbol': 'avax', 'name': 'Avalanche', 'image': 'https://assets.coingecko.com/co
 ins/images/12559/large/Avalanche_Circle_RedWhite_Trans.png?1696512369',
 'current_price': 34.79, 'market_cap': 12746055973, 'market_cap_rank': 10,
 'fully_diluted_valuation': 15108313103, 'total_volume': 520177323, 'high_24h':
 36.28, 'low_24h': 34.08, 'price_change_24h': -1.4558820470585871,
 'price_change_percentage_24h': -4.0165, 'market_cap_change_24h':
 -549272885.7637234, 'market_cap_change_percentage_24h': -4.13132,
 'circulating_supply': 367084026.783708, 'total_supply': 435116909.331076,
 'max_supply': 720000000.0, 'ath': 144.96, 'ath_change_percentage': -75.75443,
 'ath_date': '2021-11-21T14:18:56.538Z', 'atl': 2.8, 'atl_change_percentage':
 1154.76122, 'atl_date': '2020-12-31T13:15:21.540Z', 'roi': None, 'last_updated':
 '2024-01-31T20:17:23.249Z'}, {'id': 'dogecoin', 'symbol': 'doge', 'name':
 'Dogecoin', 'image':
 'https://assets.coingecko.com/coins/images/5/large/dogecoin.png?1696501409',
 'current_price': 0.079342, 'market_cap': 11285551385, 'market_cap_rank': 11,
 'fully_diluted_valuation': 11285520581, 'total_volume': 355981360, 'high_24h':
 0.081541, 'low_24h': 0.078371, 'price_change_24h': -0.001951803048947556,
 'price_change_percentage_24h': -2.40092, 'market_cap_change_24h':
 -330000749.06196785, 'market_cap_change_percentage_24h': -2.84103,
 'circulating_supply': 142883606383.705, 'total_supply': 142883686383.705,
 'max_supply': None, 'ath': 0.731578, 'ath_change_percentage': -89.08848,
 'ath_date': '2021-05-08T05:08:23.458Z', 'atl': 8.69e-05,
 'atl_change_percentage': 91755.98039, 'atl_date': '2015-05-06T00:00:00.000Z',
 'roi': None, 'last_updated': '2024-01-31T20:17:22.525Z'}, {'id': 'tron',
 'symbol': 'trx', 'name': 'TRON', 'image':
 'https://assets.coingecko.com/coins/images/1094/large/tron-logo.png?1696502193',
 'current_price': 0.112645, 'market_cap': 9890938817, 'market_cap_rank': 12,
 'fully_diluted_valuation': 9890951178, 'total_volume': 348047650, 'high_24h':

```

0.113329, 'low_24h': 0.111389, 'price_change_24h': 5.136e-05,
'price_change_percentage_24h': 0.04562, 'market_cap_change_24h':
-27132628.029712677, 'market_cap_change_percentage_24h': -0.27357,
'circulating_supply': 88134123899.9607, 'total_supply': 88134112886.102,
'max_supply': None, 'ath': 0.231673, 'ath_change_percentage': -51.19793,
'ath_date': '2018-01-05T00:00:00.000Z', 'atl': 0.00180434,
'atl_change_percentage': 6166.05809, 'atl_date': '2017-11-12T00:00:00.000Z',
'roi': {'times': 58.286818292885, 'currency': 'usd', 'percentage':
5828.6818292885}, 'last_updated': '2024-01-31T20:17:17.902Z'}, {'id':
'polkadot', 'symbol': 'dot', 'name': 'Polkadot', 'image':
'https://assets.coingecko.com/coins/images/12171/large/polkadot.png?1696512008',
'current_price': 6.76, 'market_cap': 8955554794, 'market_cap_rank': 13,
'fully_diluted_valuation': 9502527107, 'total_volume': 208440296, 'high_24h':
7.03, 'low_24h': 6.65, 'price_change_24h': -0.2532807511825945,
'price_change_percentage_24h': -3.60895, 'market_cap_change_24h':
-342160391.91056824, 'market_cap_change_percentage_24h': -3.68005,
'circulating_supply': 1325338426.54473, 'total_supply': 1406288740.36032,
'max_supply': None, 'ath': 54.98, 'ath_change_percentage': -87.60546,
'ath_date': '2021-11-04T14:10:09.301Z', 'atl': 2.7, 'atl_change_percentage':
152.63181, 'atl_date': '2020-08-20T05:48:11.359Z', 'roi': None, 'last_updated':
'2024-01-31T20:17:03.622Z'}, {'id': 'chainlink', 'symbol': 'link', 'name':
'Chainlink', 'image':
'https://assets.coingecko.com/coins/images/877/large/chainlink-new-
logo.png?1696502009', 'current_price': 15.54, 'market_cap': 8816995890,
'market_cap_rank': 14, 'fully_diluted_valuation': 15520148452, 'total_volume':
888233825, 'high_24h': 16.02, 'low_24h': 15.33, 'price_change_24h':
-0.13663514860690995, 'price_change_percentage_24h': -0.8716,
'market_cap_change_24h': -87067742.77484512, 'market_cap_change_percentage_24h':
-0.97784, 'circulating_supply': 568099971.3083414, 'total_supply': 1000000000.0,
'max_supply': 1000000000.0, 'ath': 52.7, 'ath_change_percentage': -70.10983,
'ath_date': '2021-05-10T00:13:57.214Z', 'atl': 0.148183,
'atl_change_percentage': 10529.48104, 'atl_date': '2017-11-29T00:00:00.000Z',
'roi': None, 'last_updated': '2024-01-31T20:17:17.317Z'}, {'id': 'matic-
network', 'symbol': 'matic', 'name': 'Polygon', 'image':
'https://assets.coingecko.com/coins/images/4713/large/polygon.png?1698233745',
'current_price': 0.796615, 'market_cap': 7379255993, 'market_cap_rank': 15,
'fully_diluted_valuation': 7949263012, 'total_volume': 488923512, 'high_24h':
0.830971, 'low_24h': 0.786224, 'price_change_24h': -0.01724450312586212,
'price_change_percentage_24h': -2.11885, 'market_cap_change_24h':
-180996677.57288742, 'market_cap_change_percentage_24h': -2.39406,
'circulating_supply': 9282943566.203985, 'total_supply': 10000000000.0,
'max_supply': 10000000000.0, 'ath': 2.92, 'ath_change_percentage': -72.42005,
'ath_date': '2021-12-27T02:08:34.307Z', 'atl': 0.00314376,
'atl_change_percentage': 25484.13941, 'atl_date': '2019-05-10T00:00:00.000Z',
'roi': {'times': 301.8954438412076, 'currency': 'usd', 'percentage':
30189.54438412076}, 'last_updated': '2024-01-31T20:17:13.094Z'}, {'id': 'the-
open-network', 'symbol': 'ton', 'name': 'Toncoin', 'image': 'https://assets.coin
gecko.com/coins/images/17980/large/ton_symbol.png?1696517498', 'current_price':

```

2.07, 'market_cap': 7135331264, 'market_cap_rank': 16,
'fully_diluted_valuation': 10528310550, 'total_volume': 16632990, 'high_24h':
2.12, 'low_24h': 2.06, 'price_change_24h': -0.04727502599819022,
'price_change_percentage_24h': -2.23588, 'market_cap_change_24h':
-172942194.71032333, 'market_cap_change_percentage_24h': -2.36639,
'circulating_supply': 3457876036.58154, 'total_supply': 5102160218.08661,
'max_supply': None, 'ath': 5.29, 'ath_change_percentage': -60.79977, 'ath_date':
'2021-11-12T06:50:02.476Z', 'atl': 0.519364, 'atl_change_percentage': 299.3355,
'atl_date': '2021-09-21T00:33:11.092Z', 'roi': None, 'last_updated':
'2024-01-31T20:17:19.722Z'}, {'id': 'wrapped-bitcoin', 'symbol': 'wbtc', 'name':
'Wrapped Bitcoin', 'image': 'https://assets.coingecko.com/coins/images/7598/large/wrapped_bitcoin_wbtc.png?1696507857', 'current_price': 42788, 'market_cap':
6738596916, 'market_cap_rank': 17, 'fully_diluted_valuation': 6738596916,
'total_volume': 231461311, 'high_24h': 43691, 'low_24h': 42298,
'price_change_24h': -777.8784865259659, 'price_change_percentage_24h': -1.78551,
'market_cap_change_24h': -128798215.87627125,
'market_cap_change_percentage_24h': -1.8755, 'circulating_supply':
157804.05371727, 'total_supply': 157804.05371727, 'max_supply': 157804.05371727,
'ath': 70643, 'ath_change_percentage': -38.79149, 'ath_date':
'2021-11-10T14:40:19.650Z', 'atl': 3139.17, 'atl_change_percentage': 1277.42551,
'atl_date': '2019-04-02T00:00:00.000Z', 'roi': None, 'last_updated':
'2024-01-31T20:17:12.554Z'}, {'id': 'internet-computer', 'symbol': 'icp',
'name': 'Internet Computer', 'image': 'https://assets.coingecko.com/coins/images
/14495/large/Internet_Computer_logo.png?1696514180', 'current_price': 11.75,
'market_cap': 5341416559, 'market_cap_rank': 18, 'fully_diluted_valuation':
6002096819, 'total_volume': 115013536, 'high_24h': 12.03, 'low_24h': 11.39,
'price_change_24h': -0.28432505833247923, 'price_change_percentage_24h':
-2.36338, 'market_cap_change_24h': -163098303.95720196,
'market_cap_change_percentage_24h': -2.96299, 'circulating_supply':
457356892.298105, 'total_supply': 513927726.502481, 'max_supply': None, 'ath':
700.65, 'ath_change_percentage': -98.3152, 'ath_date':
'2021-05-10T16:05:53.653Z', 'atl': 2.87, 'atl_change_percentage': 312.02176,
'atl_date': '2023-09-22T00:29:57.369Z', 'roi': None, 'last_updated':
'2024-01-31T20:17:24.393Z'}, {'id': 'shiba-inu', 'symbol': 'shib', 'name':
'Shiba Inu', 'image':
'https://assets.coingecko.com/coins/images/11939/large/shiba.png?1696511800',
'current_price': 8.99e-06, 'market_cap': 5275846786, 'market_cap_rank': 19,
'fully_diluted_valuation': 8952861533, 'total_volume': 128616855, 'high_24h':
9.23e-06, 'low_24h': 8.93e-06, 'price_change_24h': -2.24219255613e-07,
'price_change_percentage_24h': -2.43262, 'market_cap_change_24h':
-156844719.35723782, 'market_cap_change_percentage_24h': -2.88705,
'circulating_supply': 589281290115306.5, 'total_supply': 999982374055350.0,
'max_supply': None, 'ath': 8.616e-05, 'ath_change_percentage': -89.50365,
'ath_date': '2021-10-28T03:54:55.568Z', 'atl': 5.6366e-11,
'atl_change_percentage': 16044092.35667, 'atl_date': '2020-11-28T11:26:25.838Z',
'roi': None, 'last_updated': '2024-01-31T20:17:00.905Z'}, {'id': 'litecoin',
'symbol': 'ltc', 'name': 'Litecoin', 'image':
'https://assets.coingecko.com/coins/images/2/large/litecoin.png?1696501400',

```

'current_price': 67.36, 'market_cap': 4986054044, 'market_cap_rank': 20,
'fully_diluted_valuation': 5647984689, 'total_volume': 348929526, 'high_24h':
69.78, 'low_24h': 67.09, 'price_change_24h': -1.1435920664619061,
'price_change_percentage_24h': -1.6693, 'market_cap_change_24h':
-93810751.23140335, 'market_cap_change_percentage_24h': -1.84672,
'circulating_supply': 74155395.7334713, 'total_supply': 84000000.0,
'max_supply': 84000000.0, 'ath': 410.26, 'ath_change_percentage': -83.48307,
'ath_date': '2021-05-10T03:13:07.904Z', 'atl': 1.15, 'atl_change_percentage':
5798.31525, 'atl_date': '2015-01-14T00:00:00.000Z', 'roi': None, 'last_updated':
'2024-01-31T20:17:24.534Z'}, {'id': 'dai', 'symbol': 'dai', 'name': 'Dai',
'image':
'https://assets.coingecko.com/coins/images/9956/large/Badge_Dai.png?1696509996',
'current_price': 0.998184, 'market_cap': 4871524530, 'market_cap_rank': 21,
'fully_diluted_valuation': 4871524530, 'total_volume': 163126341, 'high_24h':
1.002, 'low_24h': 0.995734, 'price_change_24h': -0.000331210886362454,
'price_change_percentage_24h': -0.03317, 'market_cap_change_24h':
-310434403.2970133, 'market_cap_change_percentage_24h': -5.99068,
'circulating_supply': 4892394375.05689, 'total_supply': 4904839618.54705,
'max_supply': None, 'ath': 1.22, 'ath_change_percentage': -18.12804, 'ath_date':
'2020-03-13T03:02:50.373Z', 'atl': 0.88196, 'atl_change_percentage': 13.1528,
'atl_date': '2023-03-11T07:50:50.514Z', 'roi': None, 'last_updated':
'2024-01-31T20:15:17.817Z'}, {'id': 'bitcoin-cash', 'symbol': 'bch', 'name':
'Bitcoin Cash', 'image':
'https://assets.coingecko.com/coins/images/780/large/bitcoin-cash-
circle.png?1696501932', 'current_price': 235.75, 'market_cap': 4612582668,
'market_cap_rank': 22, 'fully_diluted_valuation': 4934734182, 'total_volume':
159603323, 'high_24h': 242.11, 'low_24h': 233.14, 'price_change_24h':
-6.070587803280034, 'price_change_percentage_24h': -2.51033,
'market_cap_change_24h': -135147873.3020687, 'market_cap_change_percentage_24h':
-2.84658, 'circulating_supply': 19629068.6466508, 'total_supply': 21000000.0,
'max_supply': 21000000.0, 'ath': 3785.82, 'ath_change_percentage': -93.71943,
'ath_date': '2017-12-20T00:00:00.000Z', 'atl': 76.93, 'atl_change_percentage':
209.05538, 'atl_date': '2018-12-16T00:00:00.000Z', 'roi': None, 'last_updated':
'2024-01-31T20:17:05.142Z'}, {'id': 'uniswap', 'symbol': 'uni', 'name':
'Uniswap', 'image':
'https://assets.coingecko.com/coins/images/12504/large/uni.jpg?1696512319',
'current_price': 6.05, 'market_cap': 4543106139, 'market_cap_rank': 23,
'fully_diluted_valuation': 6027204888, 'total_volume': 107365198, 'high_24h':
6.32, 'low_24h': 5.97, 'price_change_24h': -0.25781884614283435,
'price_change_percentage_24h': -4.08987, 'market_cap_change_24h':
-209442172.44203663, 'market_cap_change_percentage_24h': -4.40694,
'circulating_supply': 753766667.0, 'total_supply': 1000000000.0, 'max_supply':
1000000000.0, 'ath': 44.92, 'ath_change_percentage': -86.44366, 'ath_date':
'2021-05-03T05:25:04.822Z', 'atl': 1.03, 'atl_change_percentage': 491.09071,
'atl_date': '2020-09-17T01:20:38.214Z', 'roi': None, 'last_updated':
'2024-01-31T20:17:25.898Z'}, {'id': 'leo-token', 'symbol': 'leo', 'name': 'LEO
Token', 'image': 'https://assets.coingecko.com/coins/images/8418/large/leo-
token.png?1696508607', 'current_price': 3.96, 'market_cap': 3650883077,

```



```

'market_cap_rank': 24, 'fully_diluted_valuation': 3877169429, 'total_volume':
1342572, 'high_24h': 4.0, 'low_24h': 3.88, 'price_change_24h': 0.077842,
'price_change_percentage_24h': 2.00736, 'market_cap_change_24h': 70250793,
'market_cap_change_percentage_24h': 1.96197, 'circulating_supply': 927737179.9,
'total_supply': 985239504.0, 'max_supply': None, 'ath': 8.14,
'ath_change_percentage': -51.27348, 'ath_date': '2022-02-08T17:40:10.285Z',
'atl': 0.799859, 'atl_change_percentage': 395.596, 'atl_date':
'2019-12-24T15:14:35.376Z', 'roi': None, 'last_updated':
'2024-01-31T20:16:10.888Z'}, {'id': 'ethereum-classic', 'symbol': 'etc', 'name':
'Ethereum Classic', 'image':
'https://assets.coingecko.com/coins/images/453/large/ethereum-classic-
logo.png?1696501717', 'current_price': 24.79, 'market_cap': 3544004099,
'market_cap_rank': 25, 'fully_diluted_valuation': 5214459570, 'total_volume':
285983047, 'high_24h': 25.9, 'low_24h': 24.43, 'price_change_24h':
-1.019140267420262, 'price_change_percentage_24h': -3.94949,
'market_cap_change_24h': -155017086.19866276,
'market_cap_change_percentage_24h': -4.19076, 'circulating_supply':
143202119.751449, 'total_supply': 210700000.0, 'max_supply': 210700000.0, 'ath':
167.09, 'ath_change_percentage': -85.03064, 'ath_date':
'2021-05-06T18:34:22.133Z', 'atl': 0.615038, 'atl_change_percentage': 3966.6779,
'atl_date': '2016-07-25T00:00:00.000Z', 'roi': {'times': 54.07822359547531,
'currency': 'usd', 'percentage': 5407.822359547531}, 'last_updated':
'2024-01-31T20:17:16.681Z'}, {'id': 'cosmos', 'symbol': 'atom', 'name': 'Cosmos
Hub', 'image': 'https://assets.coingecko.com/coins/images/1481/large/cosmos_hub.
png?1696502525', 'current_price': 9.14, 'market_cap': 3498627697,
'market_cap_rank': 26, 'fully_diluted_valuation': 3498627697, 'total_volume':
180308066, 'high_24h': 9.6, 'low_24h': 9.05, 'price_change_24h':
-0.43665410568933005, 'price_change_percentage_24h': -4.56082,
'market_cap_change_24h': -174645072.12279892,
'market_cap_change_percentage_24h': -4.75448, 'circulating_supply':
383774098.795288, 'total_supply': 383774098.795288, 'max_supply': None, 'ath':
44.45, 'ath_change_percentage': -79.25414, 'ath_date':
'2022-01-17T00:34:41.497Z', 'atl': 1.16, 'atl_change_percentage': 694.88429,
'atl_date': '2020-03-13T02:27:44.591Z', 'roi': {'times': 90.37382345044978,
'currency': 'usd', 'percentage': 9037.382345044978}, 'last_updated':
'2024-01-31T20:17:21.307Z'}, {'id': 'stellar', 'symbol': 'xlm', 'name':
'Stellar', 'image': 'https://assets.coingecko.com/coins/images/100/large/Stellar
_symbol_black_RGB.png?1696501482', 'current_price': 0.110317, 'market_cap':
3116639275, 'market_cap_rank': 27, 'fully_diluted_valuation': 5490438071,
'total_volume': 79645593, 'high_24h': 0.11395, 'low_24h': 0.109282,
'price_change_24h': -0.003541326131668424, 'price_change_percentage_24h':
-3.1103, 'market_cap_change_24h': -112170683.692945,
'market_cap_change_percentage_24h': -3.47406, 'circulating_supply':
28383442499.8752, 'total_supply': 50001787037.0868, 'max_supply':
50001787037.0868, 'ath': 0.875563, 'ath_change_percentage': -87.34197,
'ath_date': '2018-01-03T00:00:00.000Z', 'atl': 0.00047612,
'atl_change_percentage': 23177.37468, 'atl_date': '2015-03-05T00:00:00.000Z',
'roi': None, 'last_updated': '2024-01-31T20:17:25.079Z'}, {'id': 'okb',

```

```

'symbol': 'okb', 'name': 'OKB', 'image': 'https://assets.coingecko.com/coins/images/4463/large/WeChat_Image_20220118095654.png?1696505053', 'current_price':
51.1, 'market_cap': 3055452372, 'market_cap_rank': 28,
'fully_diluted_valuation': 12015957819, 'total_volume': 11606769, 'high_24h':
53.54, 'low_24h': 50.58, 'price_change_24h': -2.3822019583687535,
'price_change_percentage_24h': -4.45389, 'market_cap_change_24h':
-149538741.30449295, 'market_cap_change_percentage_24h': -4.66581,
'circulating_supply': 60000000.0, 'total_supply': 235957685.3, 'max_supply':
300000000.0, 'ath': 64.92, 'ath_change_percentage': -21.04344, 'ath_date':
'2023-11-14T16:15:10.918Z', 'atl': 0.580608, 'atl_change_percentage':
8728.68678, 'atl_date': '2019-01-14T00:00:00.000Z', 'roi': None, 'last_updated':
'2024-01-31T20:17:03.857Z'}, {'id': 'injective-protocol', 'symbol': 'inj',
'name': 'Injective', 'image': 'https://assets.coingecko.com/coins/images/12882/large/Secondary_Symbol.png?1696512670', 'current_price': 34.43, 'market_cap':
3038591423, 'market_cap_rank': 29, 'fully_diluted_valuation': 3437623065,
'total_volume': 207930290, 'high_24h': 37.18, 'low_24h': 34.08,
'price_change_24h': -2.638259571705369, 'price_change_percentage_24h': -7.11748,
'market_cap_change_24h': -238608894.40542507,
'market_cap_change_percentage_24h': -7.28088, 'circulating_supply': 88392222.33,
'total_supply': 100000000.0, 'max_supply': None, 'ath': 45.01,
'ath_change_percentage': -22.78081, 'ath_date': '2024-01-09T06:31:10.010Z',
'atl': 0.657401, 'atl_change_percentage': 5187.26124, 'atl_date':
'2020-11-03T16:19:30.576Z', 'roi': None, 'last_updated':
'2024-01-31T20:17:24.433Z'}, {'id': 'aptos', 'symbol': 'apt', 'name': 'Aptos',
'image': 'https://assets.coingecko.com/coins/images/26455/large/aptos_round.png?1696525528', 'current_price': 8.99, 'market_cap': 3025512369, 'market_cap_rank':
30, 'fully_diluted_valuation': 9664018244, 'total_volume': 117492616,
'high_24h': 9.39, 'low_24h': 8.74, 'price_change_24h': -0.36226487602287527,
'price_change_percentage_24h': -3.87295, 'market_cap_change_24h':
-142504834.74593735, 'market_cap_change_percentage_24h': -4.49823,
'circulating_supply': 337683349.616605, 'total_supply': 1078634430.58588,
'max_supply': None, 'ath': 19.92, 'ath_change_percentage': -54.66869,
'ath_date': '2023-01-26T14:25:17.390Z', 'atl': 3.08, 'atl_change_percentage':
193.20702, 'atl_date': '2022-12-29T21:35:14.796Z', 'roi': None, 'last_updated':
'2024-01-31T20:17:25.839Z'}, {'id': 'near', 'symbol': 'near', 'name': 'NEAR
Protocol', 'image':
'https://assets.coingecko.com/coins/images/10365/large/near.jpg?1696510367',
'current_price': 2.88, 'market_cap': 2971599190, 'market_cap_rank': 31,
'fully_diluted_valuation': 3386193760, 'total_volume': 233984383, 'high_24h':
3.17, 'low_24h': 2.84, 'price_change_24h': -0.2737743314629304,
'price_change_percentage_24h': -8.67093, 'market_cap_change_24h':
-290862806.0543165, 'market_cap_change_percentage_24h': -8.91544,
'circulating_supply': 1031037152.32197, 'total_supply': 1174886413.40727,
'max_supply': None, 'ath': 20.44, 'ath_change_percentage': -85.70565,
'ath_date': '2022-01-16T22:09:45.873Z', 'atl': 0.526762,
'atl_change_percentage': 454.61366, 'atl_date': '2020-11-04T16:09:15.137Z',
'roi': None, 'last_updated': '2024-01-31T20:17:22.112Z'}, {'id': 'monero',
'symbol': 'xmr', 'name': 'Monero', 'image':

```

'https://assets.coingecko.com/coins/images/69/large/monero_logo.png?1696501460',
 'current_price': 164.2, 'market_cap': 2970469366, 'market_cap_rank': 32,
 'fully_diluted_valuation': None, 'total_volume': 94543593, 'high_24h': 166.41,
 'low_24h': 158.55, 'price_change_24h': 1.97, 'price_change_percentage_24h':
 1.21391, 'market_cap_change_24h': 26086760, 'market_cap_change_percentage_24h':
 0.88598, 'circulating_supply': 18147820.3764146, 'total_supply': None,
 'max_supply': None, 'ath': 542.33, 'ath_change_percentage': -69.61873,
 'ath_date': '2018-01-09T00:00:00.000Z', 'atl': 0.216177,
 'atl_change_percentage': 76117.92471, 'atl_date': '2015-01-14T00:00:00.000Z',
 'roi': None, 'last_updated': '2024-01-31T20:17:19.628Z'}, {'id': 'optimism',
 'symbol': 'op', 'name': 'Optimism', 'image':
 'https://assets.coingecko.com/coins/images/25244/large/Optimism.png?1696524385',
 'current_price': 2.97, 'market_cap': 2845757173, 'market_cap_rank': 33,
 'fully_diluted_valuation': 12766563196, 'total_volume': 222404303, 'high_24h':
 3.29, 'low_24h': 2.95, 'price_change_24h': -0.3081187586087153,
 'price_change_percentage_24h': -9.40143, 'market_cap_change_24h':
 -290551280.10596895, 'market_cap_change_percentage_24h': -9.26412,
 'circulating_supply': 957378568.0, 'total_supply': 4294967296.0, 'max_supply':
 4294967296.0, 'ath': 4.23, 'ath_change_percentage': -29.29117, 'ath_date':
 '2024-01-12T13:44:50.085Z', 'atl': 0.402159, 'atl_change_percentage': 643.4305,
 'atl_date': '2022-06-18T20:54:52.178Z', 'roi': None, 'last_updated':
 '2024-01-31T20:16:54.548Z'}, {'id': 'bittensor', 'symbol': 'tao', 'name':
 'Bittensor', 'image': 'https://assets.coingecko.com/coins/images/28452/large/ARU
 sPeNQ_400x400.jpeg?1696527447', 'current_price': 454.77, 'market_cap':
 2799362359, 'market_cap_rank': 35, 'fully_diluted_valuation': 2799362359,
 'total_volume': 20224227, 'high_24h': 463.4, 'low_24h': 414.71,
 'price_change_24h': 12.89, 'price_change_percentage_24h': 2.9176,
 'market_cap_change_24h': 93110626, 'market_cap_change_percentage_24h': 3.44058,
 'circulating_supply': 6151457.0, 'total_supply': 6151782.0, 'max_supply':
 21000000.0, 'ath': 470.58, 'ath_change_percentage': -2.59417, 'ath_date':
 '2024-01-30T15:04:50.176Z', 'atl': 30.83, 'atl_change_percentage': 1386.78979,
 'atl_date': '2023-05-14T08:57:53.732Z', 'roi': None, 'last_updated':
 '2024-01-31T20:17:14.037Z'}, {'id': 'celestia', 'symbol': 'tia', 'name':
 'Celestia', 'image':
 'https://assets.coingecko.com/coins/images/31967/large/tia.jpg?1696530772',
 'current_price': 16.53, 'market_cap': 2678639576, 'market_cap_rank': 34,
 'fully_diluted_valuation': 16951107858, 'total_volume': 175941647, 'high_24h':
 18.47, 'low_24h': 16.52, 'price_change_24h': -1.916058298977262,
 'price_change_percentage_24h': -10.38685, 'market_cap_change_24h':
 -291617073.42991495, 'market_cap_change_percentage_24h': -9.81791,
 'circulating_supply': 161207911.311572, 'total_supply': 1020164383.56157,
 'max_supply': None, 'ath': 20.16, 'ath_change_percentage': -17.47275,
 'ath_date': '2024-01-15T10:34:34.684Z', 'atl': 2.08, 'atl_change_percentage':
 698.57748, 'atl_date': '2023-10-31T15:14:31.951Z', 'roi': None, 'last_updated':
 '2024-01-31T20:16:57.983Z'}, {'id': 'immutable-x', 'symbol': 'imx', 'name':
 'Immutable', 'image':
 'https://assets.coingecko.com/coins/images/17233/large/immutableX-symbol-BLK-
 RGB.png?1696516787', 'current_price': 1.96, 'market_cap': 2652702264,

'market_cap_rank': 36, 'fully_diluted_valuation': 3913161145, 'total_volume': 60936507, 'high_24h': 2.06, 'low_24h': 1.93, 'price_change_24h': -0.09931585548197441, 'price_change_percentage_24h': -4.82465, 'market_cap_change_24h': -135986746.55249596, 'market_cap_change_percentage_24h': -4.87637, 'circulating_supply': 1355784832.490024, 'total_supply': 2000000000.0, 'max_supply': 2000000000.0, 'ath': 9.52, 'ath_change_percentage': -79.24919, 'ath_date': '2021-11-26T01:03:01.536Z', 'atl': 0.378055, 'atl_change_percentage': 422.53388, 'atl_date': '2022-12-31T07:36:37.649Z', 'roi': None, 'last_updated': '2024-01-31T20:17:25.888Z'}, {'id': 'first-digital-usd', 'symbol': 'fdusd', 'name': 'First Digital USD', 'image': 'https://assets.coingecko.com/coins/images/31079/large/firstfigital.jpeg?1696529912', 'current_price': 0.991358, 'market_cap': 2553597524, 'market_cap_rank': 38, 'fully_diluted_valuation': 2553597524, 'total_volume': 5622103135, 'high_24h': 1.013, 'low_24h': 0.992071, 'price_change_24h': -0.008908238398375401, 'price_change_percentage_24h': -0.89059, 'market_cap_change_24h': -24794875.542449474, 'market_cap_change_percentage_24h': -0.96164, 'circulating_supply': 2578169834.31, 'total_supply': 2578169834.31, 'max_supply': None, 'ath': 1.041, 'ath_change_percentage': -4.87328, 'ath_date': '2023-10-23T22:55:15.103Z', 'atl': 0.942129, 'atl_change_percentage': 5.14453, 'atl_date': '2023-08-17T21:55:41.478Z', 'roi': None, 'last_updated': '2024-01-31T20:16:58.795Z'}, {'id': 'lido-dao', 'symbol': 'ldo', 'name': 'Lido DAO', 'image': 'https://assets.coingecko.com/coins/images/13573/large/Lido_DAO.png?1696513326', 'current_price': 2.85, 'market_cap': 2535294488, 'market_cap_rank': 37, 'fully_diluted_valuation': 2847985678, 'total_volume': 66265226, 'high_24h': 3.13, 'low_24h': 2.84, 'price_change_24h': -0.2515407994824681, 'price_change_percentage_24h': -8.11471, 'market_cap_change_24h': -226343995.58850002, 'market_cap_change_percentage_24h': -8.196, 'circulating_supply': 890206193.113119, 'total_supply': 1000000000.0, 'max_supply': 1000000000.0, 'ath': 7.3, 'ath_change_percentage': -60.50782, 'ath_date': '2021-08-20T08:35:20.158Z', 'atl': 0.40615, 'atl_change_percentage': 610.0985, 'atl_date': '2022-06-18T20:55:12.035Z', 'roi': None, 'last_updated': '2024-01-31T20:17:06.370Z'}, {'id': 'filecoin', 'symbol': 'fil', 'name': 'Filecoin', 'image': 'https://assets.coingecko.com/coins/images/12817/large/filecoin.png?1696512609', 'current_price': 5.02, 'market_cap': 2511249704, 'market_cap_rank': 39, 'fully_diluted_valuation': 9821492597, 'total_volume': 146971540, 'high_24h': 5.29, 'low_24h': 4.97, 'price_change_24h': -0.2581753621284939, 'price_change_percentage_24h': -4.89101, 'market_cap_change_24h': -140154676.60922575, 'market_cap_change_percentage_24h': -5.28605, 'circulating_supply': 501395344.0, 'total_supply': 1960956188.0, 'max_supply': 1960956193.0, 'ath': 236.84, 'ath_change_percentage': -97.86254, 'ath_date': '2021-04-01T13:29:41.564Z', 'atl': 2.64, 'atl_change_percentage': 91.68646, 'atl_date': '2022-12-16T22:45:28.552Z', 'roi': None, 'last_updated': '2024-01-31T20:17:16.429Z'}, {'id': 'hedera-hashgraph', 'symbol': 'hbar', 'name': 'Hedera', 'image': 'https://assets.coingecko.com/coins/images/3688/large/hbar.png?1696504364',

'current_price': 0.070233, 'market_cap': 2360543253, 'market_cap_rank': 40,
 'fully_diluted_valuation': 3505903026, 'total_volume': 50841645, 'high_24h':
 0.074509, 'low_24h': 0.069089, 'price_change_24h': -0.004163475859900151,
 'price_change_percentage_24h': -5.59634, 'market_cap_change_24h':
 -141680044.56352425, 'market_cap_change_percentage_24h': -5.66217,
 'circulating_supply': 33665267341.8113, 'total_supply': 50000000000.0,
 'max_supply': 50000000000.0, 'ath': 0.569229, 'ath_change_percentage':
 -87.53526, 'ath_date': '2021-09-15T10:40:28.318Z', 'atl': 0.00986111,
 'atl_change_percentage': 619.52259, 'atl_date': '2020-01-02T17:30:24.852Z',
 'roi': None, 'last_updated': '2024-01-31T20:17:21.005Z'}, {'id': 'arbitrum',
 'symbol': 'arb', 'name': 'Arbitrum', 'image': 'https://assets.coingecko.com/coin
 s/images/16547/large/photo_2023-03-29_21.47.00.jpeg?1696516109',
 'current_price': 1.8, 'market_cap': 2294266428, 'market_cap_rank': 41,
 'fully_diluted_valuation': 17994246494, 'total_volume': 488698980, 'high_24h':
 1.95, 'low_24h': 1.78, 'price_change_24h': -0.14715474253913619,
 'price_change_percentage_24h': -7.54946, 'market_cap_change_24h':
 -188772314.20347452, 'market_cap_change_percentage_24h': -7.60247,
 'circulating_supply': 1275000000.0, 'total_supply': 10000000000.0, 'max_supply':
 10000000000.0, 'ath': 2.39, 'ath_change_percentage': -24.04881, 'ath_date':
 '2024-01-12T12:29:59.231Z', 'atl': 0.744925, 'atl_change_percentage': 143.70887,
 'atl_date': '2023-09-11T19:40:49.196Z', 'roi': None, 'last_updated':
 '2024-01-31T20:17:21.403Z'}, {'id': 'kaspa', 'symbol': 'kas', 'name': 'Kaspa',
 'image': 'https://assets.coingecko.com/coins/images/25751/large/kaspa-icon-
 exchanges.png?1696524837', 'current_price': 0.1012, 'market_cap': 2275478268,
 'market_cap_rank': 42, 'fully_diluted_valuation': 2275447641, 'total_volume':
 17791028, 'high_24h': 0.106127, 'low_24h': 0.099431, 'price_change_24h':
 -0.004674356603429645, 'price_change_percentage_24h': -4.41502,
 'market_cap_change_24h': -109953124.43338442,
 'market_cap_change_percentage_24h': -4.60936, 'circulating_supply':
 22520776242.5199, 'total_supply': 22520842613.2048, 'max_supply': 28704026601.0,
 'ath': 0.152699, 'ath_change_percentage': -33.69359, 'ath_date':
 '2023-11-19T21:34:58.238Z', 'atl': 0.00017105, 'atl_change_percentage':
 59093.07179, 'atl_date': '2022-05-26T14:42:59.316Z', 'roi': None,
 'last_updated': '2024-01-31T20:16:55.414Z'}, {'id': 'blockstack', 'symbol':
 'stx', 'name': 'Stacks', 'image': 'https://assets.coingecko.com/coins/images/206
 9/large/Stacks_logo_full.png?1696503035', 'current_price': 1.52, 'market_cap':
 2205093212, 'market_cap_rank': 43, 'fully_diluted_valuation': 2789224692,
 'total_volume': 52037574, 'high_24h': 1.58, 'low_24h': 1.47, 'price_change_24h':
 -0.04137856085458136, 'price_change_percentage_24h': -2.64802,
 'market_cap_change_24h': -42589857.47614479, 'market_cap_change_percentage_24h':
 -1.89483, 'circulating_supply': 1437266589.18199, 'total_supply': 1818000000.0,
 'max_supply': 1818000000.0, 'ath': 3.39, 'ath_change_percentage': -54.66799,
 'ath_date': '2021-12-01T01:32:34.725Z', 'atl': 0.04559639,
 'atl_change_percentage': 3269.98212, 'atl_date': '2020-03-13T02:29:26.415Z',
 'roi': {'times': 11.677056851880925, 'currency': 'usd', 'percentage':
 1167.7056851880925}, 'last_updated': '2024-01-31T20:17:10.651Z'}, {'id':
 'crypto-com-chain', 'symbol': 'cro', 'name': 'Cronos', 'image': 'https://assets.
 coingecko.com/coins/images/7310/large/cro_token_logo.png?1696507599',

'current_price': 0.080908, 'market_cap': 2136188795, 'market_cap_rank': 44,
 'fully_diluted_valuation': 2417613635, 'total_volume': 7783760, 'high_24h':
 0.085481, 'low_24h': 0.080432, 'price_change_24h': -0.004572889348259641,
 'price_change_percentage_24h': -5.34961, 'market_cap_change_24h':
 -124247515.50055408, 'market_cap_change_percentage_24h': -5.49662,
 'circulating_supply': 26507818672.218, 'total_supply': 30000000000.0,
 'max_supply': None, 'ath': 0.965407, 'ath_change_percentage': -91.56262,
 'ath_date': '2021-11-24T15:53:54.855Z', 'atl': 0.0121196,
 'atl_change_percentage': 572.09355, 'atl_date': '2019-02-08T00:00:00.000Z',
 'roi': None, 'last_updated': '2024-01-31T20:17:21.742Z'}, {'id': 'vechain',
 'symbol': 'vet', 'name': 'VeChain', 'image': 'https://assets.coingecko.com/coins
 /images/1167/large/VET-Token_Icon.png?1696502256', 'current_price': 0.02837107,
 'market_cap': 2054776171, 'market_cap_rank': 45, 'fully_diluted_valuation':
 2429776355, 'total_volume': 43137150, 'high_24h': 0.02911992, 'low_24h':
 0.02775878, 'price_change_24h': -0.00067826919009854,
 'price_change_percentage_24h': -2.33489, 'market_cap_change_24h':
 -57825586.24065995, 'market_cap_change_percentage_24h': -2.73717,
 'circulating_supply': 72714516834.0, 'total_supply': 85985041177.0,
 'max_supply': 86712634466.0, 'ath': 0.280991, 'ath_change_percentage':
 -89.83302, 'ath_date': '2021-04-19T01:08:21.675Z', 'atl': 0.00191713,
 'atl_change_percentage': 1390.15722, 'atl_date': '2020-03-13T02:29:59.652Z',
 'roi': {'times': 3.3127384266333757, 'currency': 'eth', 'percentage':
 331.2738426633376}, 'last_updated': '2024-01-31T20:17:17.246Z'}, {'id':
 'mantle', 'symbol': 'mnt', 'name': 'Mantle', 'image':
 'https://assets.coingecko.com/coins/images/30980/large/token-
 logo.png?1696529819', 'current_price': 0.588904, 'market_cap': 1856602275,
 'market_cap_rank': 46, 'fully_diluted_valuation': 3646067912, 'total_volume':
 103876768, 'high_24h': 0.606768, 'low_24h': 0.577427, 'price_change_24h':
 -0.01591136543000971, 'price_change_percentage_24h': -2.63078,
 'market_cap_change_24h': -58124325.252099276,
 'market_cap_change_percentage_24h': -3.03565, 'circulating_supply':
 3166917893.03314, 'total_supply': 6219316794.99, 'max_supply': 6219316794.99,
 'ath': 0.849137, 'ath_change_percentage': -30.98619, 'ath_date':
 '2024-01-11T13:25:10.126Z', 'atl': 0.307978, 'atl_change_percentage': 90.2808,
 'atl_date': '2023-10-18T02:50:46.942Z', 'roi': None, 'last_updated':
 '2024-01-31T20:17:07.110Z'}, {'id': 'maker', 'symbol': 'mkr', 'name': 'Maker',
 'image': 'https://assets.coingecko.com/coins/images/1364/large/Mark_Maker.png?16
 96502423', 'current_price': 1965.55, 'market_cap': 1811296239,
 'market_cap_rank': 47, 'fully_diluted_valuation': 1919684276, 'total_volume':
 69300421, 'high_24h': 2040.97, 'low_24h': 1950.35, 'price_change_24h':
 -65.63716382845223, 'price_change_percentage_24h': -3.23146,
 'market_cap_change_24h': -63106730.13032913, 'market_cap_change_percentage_24h':
 -3.36676, 'circulating_supply': 922432.632575491, 'total_supply':
 977631.036950888, 'max_supply': 1005577.0, 'ath': 6292.31,
 'ath_change_percentage': -68.54549, 'ath_date': '2021-05-03T21:54:29.333Z',
 'atl': 168.36, 'atl_change_percentage': 1075.60309, 'atl_date':
 '2020-03-16T20:52:36.527Z', 'roi': None, 'last_updated':
 '2024-01-31T20:17:24.847Z'}, {'id': 'sui', 'symbol': 'sui', 'name': 'Sui',

'image': 'https://assets.coingecko.com/coins/images/26375/large/sui_asset.jpeg?1696525453', 'current_price': 1.58, 'market_cap': 1735327718, 'market_cap_rank': 48, 'fully_diluted_valuation': 15762133686, 'total_volume': 486108458, 'high_24h': 1.63, 'low_24h': 1.49, 'price_change_24h': 0.04500039, 'price_change_percentage_24h': 2.93453, 'market_cap_change_24h': 46919030, 'market_cap_change_percentage_24h': 2.77889, 'circulating_supply': 1100947214.55346, 'total_supply': 10000000000.0, 'max_supply': 10000000000.0, 'ath': 2.16, 'ath_change_percentage': -26.53868, 'ath_date': '2023-05-03T12:00:26.430Z', 'atl': 0.364846, 'atl_change_percentage': 335.41975, 'atl_date': '2023-10-19T10:40:30.078Z', 'roi': None, 'last_updated': '2024-01-31T20:17:14.781Z'}, {'id': 'render-token', 'symbol': 'rndr', 'name': 'Render', 'image': 'https://assets.coingecko.com/coins/images/11636/large/rndr.png?1696511529', 'current_price': 4.46, 'market_cap': 1675165601, 'market_cap_rank': 49, 'fully_diluted_valuation': 2364983369, 'total_volume': 186290487, 'high_24h': 4.72, 'low_24h': 4.41, 'price_change_24h': -0.2453440423655877, 'price_change_percentage_24h': -5.21836, 'market_cap_change_24h': -105772410.1128335, 'market_cap_change_percentage_24h': -5.93914, 'circulating_supply': 376146335.687948, 'total_supply': 531039932.967948, 'max_supply': 531039932.967948, 'ath': 8.78, 'ath_change_percentage': -48.69935, 'ath_date': '2021-11-21T10:03:19.097Z', 'atl': 0.03665669, 'atl_change_percentage': 12191.72786, 'atl_date': '2020-06-16T13:22:25.900Z', 'roi': None, 'last_updated': '2024-01-31T20:17:14.579Z'}, {'id': 'sei-network', 'symbol': 'sei', 'name': 'Sei', 'image': 'https://assets.coingecko.com/coins/images/28205/large/Sei_Logo_-_Transparent.png?1696527207', 'current_price': 0.677783, 'market_cap': 1662682533, 'market_cap_rank': 50, 'fully_diluted_valuation': 6856422816, 'total_volume': 269349938, 'high_24h': 0.739294, 'low_24h': 0.673436, 'price_change_24h': -0.05993496048801228, 'price_change_percentage_24h': -8.12438, 'market_cap_change_24h': -130686583.3027978, 'market_cap_change_percentage_24h': -7.28721, 'circulating_supply': 2425000000.0, 'total_supply': 10000000000.0, 'max_supply': None, 'ath': 0.877895, 'ath_change_percentage': -22.60342, 'ath_date': '2024-01-03T21:20:26.826Z', 'atl': 0.095364, 'atl_change_percentage': 612.49318, 'atl_date': '2023-10-19T08:05:30.655Z', 'roi': None, 'last_updated': '2024-01-31T20:17:20.407Z'}, {'id': 'quant-network', 'symbol': 'qnt', 'name': 'Quant', 'image': 'https://assets.coingecko.com/coins/images/3370/large/5Z0u7brX_400x400.jpg?1696504070', 'current_price': 103.43, 'market_cap': 1503076582, 'market_cap_rank': 51, 'fully_diluted_valuation': 1510136826, 'total_volume': 26253456, 'high_24h': 107.35, 'low_24h': 102.12, 'price_change_24h': -3.8758938718169134, 'price_change_percentage_24h': -3.61208, 'market_cap_change_24h': -56852353.97013235, 'market_cap_change_percentage_24h': -3.64455, 'circulating_supply': 14544176.164091088, 'total_supply': 14612493.0, 'max_supply': 14612493.0, 'ath': 427.42, 'ath_change_percentage': -75.62729, 'ath_date': '2021-09-11T09:15:00.668Z', 'atl': 0.215773, 'atl_change_percentage': 48179.56975, 'atl_date': '2018-08-23T00:00:00.000Z', 'roi': {'times': 18.31591655262655, 'currency': 'eth', 'percentage': 1831.591655262655}, 'last_updated': '2024-01-31T20:17:17.806Z'}, {'id': 'the-

graph', 'symbol': 'grt', 'name': 'The Graph', 'image': 'https://assets.coingecko.com/coins/images/13397/large/Graph_Token.png?1696513159', 'current_price': 0.156082, 'market_cap': 1461228770, 'market_cap_rank': 54, 'fully_diluted_valuation': 1678722633, 'total_volume': 51890424, 'high_24h': 0.162876, 'low_24h': 0.153609, 'price_change_24h': -0.006781219669670463, 'price_change_percentage_24h': -4.16376, 'market_cap_change_24h': -69202682.59236622, 'market_cap_change_percentage_24h': -4.52178, 'circulating_supply': 9390319737.05767, 'total_supply': 10788004319.0, 'max_supply': 10788004319.0, 'ath': 2.84, 'ath_change_percentage': -94.46616, 'ath_date': '2021-02-12T07:28:45.775Z', 'atl': 0.052051, 'atl_change_percentage': 202.09649, 'atl_date': '2022-11-22T10:05:03.503Z', 'roi': None, 'last_updated': '2024-01-31T20:17:24.987Z'}, {'id': 'true-usd', 'symbol': 'tusd', 'name': 'TrueUSD', 'image': 'https://assets.coingecko.com/coins/images/3449/large/tusd.png?1696504140', 'current_price': 0.982129, 'market_cap': 1459006178, 'market_cap_rank': 53, 'fully_diluted_valuation': 1459006178, 'total_volume': 79334697, 'high_24h': 0.993601, 'low_24h': 0.981157, 'price_change_24h': -0.009106664890027427, 'price_change_percentage_24h': -0.91872, 'market_cap_change_24h': -19172659.004128218, 'market_cap_change_percentage_24h': -1.29705, 'circulating_supply': 1488457471.81, 'total_supply': 1488457471.81, 'max_supply': None, 'ath': 1.62, 'ath_change_percentage': -38.89508, 'ath_date': '2018-08-26T20:41:09.375Z', 'atl': 0.88355, 'atl_change_percentage': 11.9338, 'atl_date': '2020-03-12T10:47:51.380Z', 'roi': None, 'last_updated': '2024-01-31T20:17:17.847Z'}, {'id': 'thorchain', 'symbol': 'rune', 'name': 'THORChain', 'image': 'https://assets.coingecko.com/coins/images/6595/large/Rune_200x200.png?1696506946', 'current_price': 4.8, 'market_cap': 1440032697, 'market_cap_rank': 56, 'fully_diluted_valuation': 2394462937, 'total_volume': 411984425, 'high_24h': 4.93, 'low_24h': 4.63, 'price_change_24h': 0.04820514, 'price_change_percentage_24h': 1.01396, 'market_cap_change_24h': 11527557, 'market_cap_change_percentage_24h': 0.80697, 'circulating_supply': 300700561.0, 'total_supply': 500000000.0, 'max_supply': 500000000.0, 'ath': 20.87, 'ath_change_percentage': -76.73907, 'ath_date': '2021-05-19T00:30:09.436Z', 'atl': 0.00851264, 'atl_change_percentage': 56920.98509, 'atl_date': '2019-09-28T00:00:00.000Z', 'roi': {'times': 125.37804772329713, 'currency': 'usd', 'percentage': 12537.804772329713}, 'last_updated': '2024-01-31T20:17:08.342Z'}, {'id': 'elrond-erd-2', 'symbol': 'egld', 'name': 'MultiversX', 'image': 'https://assets.coingecko.com/coins/images/12335/large/egld-token-logo.png?1696512162', 'current_price': 53.9, 'market_cap': 1425328757, 'market_cap_rank': 52, 'fully_diluted_valuation': 1425605652, 'total_volume': 35640629, 'high_24h': 58.21, 'low_24h': 53.76, 'price_change_24h': -4.219429584966996, 'price_change_percentage_24h': -7.25949, 'market_cap_change_24h': -117877169.95966887, 'market_cap_change_percentage_24h': -7.63846, 'circulating_supply': 26520120.0, 'total_supply': 26525272.0, 'max_supply': 31415926.0, 'ath': 545.64, 'ath_change_percentage': -90.0012, 'ath_date': '2021-11-23T10:33:26.737Z', 'atl': 6.51, 'atl_change_percentage': 738.48498, 'atl_date': '2020-10-07T01:44:53.554Z', 'roi': None, 'last_updated':

'2024-01-31T20:17:23.216Z'}, {'id': 'rocket-pool-eth', 'symbol': 'reth', 'name': 'Rocket Pool ETH', 'image': 'https://assets.coingecko.com/coins/images/20764/large/reth.png?1696520159', 'current_price': 2534.41, 'market_cap': 1422094874, 'market_cap_rank': 55, 'fully_diluted_valuation': 1422094874, 'total_volume': 7806342, 'high_24h': 2616.61, 'low_24h': 2506.12, 'price_change_24h': -69.37990062230801, 'price_change_percentage_24h': -2.66458, 'market_cap_change_24h': -38915238.67014122, 'market_cap_change_percentage_24h': -2.66358, 'circulating_supply': 561021.911344942, 'total_supply': 561021.911344942, 'max_supply': None, 'ath': 4814.31, 'ath_change_percentage': -47.1697, 'ath_date': '2021-12-01T08:03:50.749Z', 'atl': 887.26, 'atl_change_percentage': 186.65829, 'atl_date': '2022-06-18T20:55:45.957Z', 'roi': None, 'last_updated': '2024-01-31T20:17:19.072Z'}, {'id': 'bitcoin-cash-sv', 'symbol': 'bsv', 'name': 'Bitcoin SV', 'image': 'https://assets.coingecko.com/coins/images/6799/large/BSV.png?1696507128', 'current_price': 70.04, 'market_cap': 1376608975, 'market_cap_rank': 57, 'fully_diluted_valuation': 1473279338, 'total_volume': 51445437, 'high_24h': 72.89, 'low_24h': 68.63, 'price_change_24h': -2.60975808947272, 'price_change_percentage_24h': -3.59247, 'market_cap_change_24h': -50076318.451135874, 'market_cap_change_percentage_24h': -3.50998, 'circulating_supply': 19622068.75, 'total_supply': 21000000.0, 'max_supply': 21000000.0, 'ath': 489.75, 'ath_change_percentage': -85.57415, 'ath_date': '2021-04-16T17:09:04.630Z', 'atl': 21.43, 'atl_change_percentage': 229.60686, 'atl_date': '2023-06-10T04:32:12.266Z', 'roi': None, 'last_updated': '2024-01-31T20:17:19.279Z'}, {'id': 'algorand', 'symbol': 'algo', 'name': 'Algorand', 'image': 'https://assets.coingecko.com/coins/images/4380/large/download.png?1696504978', 'current_price': 0.160936, 'market_cap': 1290443046, 'market_cap_rank': 58, 'fully_diluted_valuation': 1290443122, 'total_volume': 37386120, 'high_24h': 0.168698, 'low_24h': 0.158183, 'price_change_24h': -0.007345684627294957, 'price_change_percentage_24h': -4.3651, 'market_cap_change_24h': -64175775.8593061, 'market_cap_change_percentage_24h': -4.73755, 'circulating_supply': 8046490828.2953, 'total_supply': 8046490657.31391, 'max_supply': 10000000000.0, 'ath': 3.56, 'ath_change_percentage': -95.44539, 'ath_date': '2019-06-20T14:51:19.480Z', 'atl': 0.087513, 'atl_change_percentage': 85.33897, 'atl_date': '2023-09-11T19:42:08.247Z', 'roi': {'times': -0.9329431946666195, 'currency': 'usd', 'percentage': -93.29431946666195}, 'last_updated': '2024-01-31T20:17:04.955Z'}, {'id': 'ordinals', 'symbol': 'ordi', 'name': 'ORDI', 'image': 'https://assets.coingecko.com/coins/images/30162/large/ordi.png?1696529082', 'current_price': 60.96, 'market_cap': 1279176359, 'market_cap_rank': 60, 'fully_diluted_valuation': 1279176359, 'total_volume': 250595458, 'high_24h': 64.29, 'low_24h': 58.54, 'price_change_24h': -1.8207563506307878, 'price_change_percentage_24h': -2.90004, 'market_cap_change_24h': -41866396.60044265, 'market_cap_change_percentage_24h': -3.16919, 'circulating_supply': 21000000.0, 'total_supply': 21000000.0, 'max_supply': None, 'ath': 89.94, 'ath_change_percentage': -32.17962, 'ath_date': '2024-01-02T11:30:17.565Z', 'atl': 2.86, 'atl_change_percentage': 2032.05563,

'atl_date': '2023-09-11T15:22:32.140Z', 'roi': None, 'last_updated':
 '2024-01-31T20:16:53.747Z'}, {'id': 'aave', 'symbol': 'aave', 'name': 'Aave',
 'image':
 'https://assets.coingecko.com/coins/images/12645/large/AAVE.png?1696512452',
 'current_price': 86.61, 'market_cap': 1269721254, 'market_cap_rank': 59,
 'fully_diluted_valuation': 1380509515, 'total_volume': 216228266, 'high_24h':
 95.24, 'low_24h': 85.46, 'price_change_24h': -7.8020217298459755,
 'price_change_percentage_24h': -8.26395, 'market_cap_change_24h':
 -118745427.66609216, 'market_cap_change_percentage_24h': -8.55227,
 'circulating_supply': 14715972.501465166, 'total_supply': 16000000.0,
 'max_supply': 16000000.0, 'ath': 661.69, 'ath_change_percentage': -86.79194,
 'ath_date': '2021-05-18T21:19:59.514Z', 'atl': 26.02, 'atl_change_percentage':
 235.84113, 'atl_date': '2020-11-05T09:20:11.928Z', 'roi': None, 'last_updated':
 '2024-01-31T20:17:24.188Z'}, {'id': 'mina-protocol', 'symbol': 'mina', 'name':
 'Mina Protocol', 'image': 'https://assets.coingecko.com/coins/images/15628/large/
 JM4_vQ34_400x400.png?1696515261', 'current_price': 1.18, 'market_cap':
 1227484013, 'market_cap_rank': 61, 'fully_diluted_valuation': 1317565331,
 'total_volume': 49227871, 'high_24h': 1.19, 'low_24h': 1.11, 'price_change_24h':
 0.0238562, 'price_change_percentage_24h': 2.06558, 'market_cap_change_24h':
 17066312, 'market_cap_change_percentage_24h': 1.40995, 'circulating_supply':
 1044201332.84004, 'total_supply': 1120840012.84004, 'max_supply': None, 'ath':
 9.09, 'ath_change_percentage': -87.04392, 'ath_date':
 '2021-06-01T01:42:37.064Z', 'atl': 0.351341, 'atl_change_percentage': 235.21609,
 'atl_date': '2023-10-11T04:00:22.740Z', 'roi': None, 'last_updated':
 '2024-01-31T20:17:13.450Z'}, {'id': 'helium', 'symbol': 'hnt', 'name': 'Helium',
 'image': 'https://assets.coingecko.com/coins/images/4284/large/Helium_HNT.png?16
 96504894', 'current_price': 7.69, 'market_cap': 1110896262, 'market_cap_rank':
 63, 'fully_diluted_valuation': 1721125334, 'total_volume': 12272744, 'high_24h':
 7.97, 'low_24h': 7.39, 'price_change_24h': -0.2711673932708436,
 'price_change_percentage_24h': -3.40625, 'market_cap_change_24h':
 -36532029.41501665, 'market_cap_change_percentage_24h': -3.18382,
 'circulating_supply': 143934820.830308, 'total_supply': 223000000.0,
 'max_supply': 223000000.0, 'ath': 54.88, 'ath_change_percentage': -85.79463,
 'ath_date': '2021-11-12T23:08:25.301Z', 'atl': 0.113248,
 'atl_change_percentage': 6783.57364, 'atl_date': '2020-04-18T00:19:10.902Z',
 'roi': None, 'last_updated': '2024-01-31T20:17:08.077Z'}, {'id': 'tokenize-
 xchange', 'symbol': 'tkx', 'name': 'Tokenize Xchange', 'image':
 'https://assets.coingecko.com/coins/images/4984/large/TKX_-_Logo_-
 _RGB-15.png?1696505519', 'current_price': 13.74, 'market_cap': 1093389878,
 'market_cap_rank': 62, 'fully_diluted_valuation': 1366805688, 'total_volume':
 20154191, 'high_24h': 14.07, 'low_24h': 13.68, 'price_change_24h':
 -0.3272713264400764, 'price_change_percentage_24h': -2.3261,
 'market_cap_change_24h': -32544873.586507797,
 'market_cap_change_percentage_24h': -2.89048, 'circulating_supply':
 79995999.94518414, 'total_supply': 100000000.0, 'max_supply': 100000000.0,
 'ath': 22.3, 'ath_change_percentage': -38.02229, 'ath_date':
 '2022-10-31T10:23:59.455Z', 'atl': 0.111255, 'atl_change_percentage':
 12320.77482, 'atl_date': '2019-04-28T00:00:00.000Z', 'roi': {'times':

46.305470325186505, 'currency': 'usd', 'percentage': 4630.547032518651},
 'last_updated': '2024-01-31T20:17:13.681Z'}, {'id': 'sats-ordinals', 'symbol':
 'sats', 'name': 'SATS (Ordinals)', 'image': 'https://assets.coingecko.com/coins/
 images/30666/large/_dD8qr3M_400x400.png?1702913020', 'current_price':
 5.15965e-07, 'market_cap': 1083359980, 'market_cap_rank': 65,
 'fully_diluted_valuation': 1083359980, 'total_volume': 48493008, 'high_24h':
 5.46234e-07, 'low_24h': 4.83001e-07, 'price_change_24h': -1.5924623e-10,
 'price_change_percentage_24h': -0.03085, 'market_cap_change_24h':
 -3049896.3470232487, 'market_cap_change_percentage_24h': -0.28073,
 'circulating_supply': 2100000000000000.0, 'total_supply': 2100000000000000.0,
 'max_supply': 2100000000000000.0, 'ath': 9.22983e-07, 'ath_change_percentage':
 -44.09527, 'ath_date': '2023-12-15T11:45:07.985Z', 'atl': 3.189e-09,
 'atl_change_percentage': 16079.81095, 'atl_date': '2023-07-08T13:03:18.882Z',
 'roi': None, 'last_updated': '2024-01-31T20:17:00.507Z'}, {'id': 'flow',
 'symbol': 'flow', 'name': 'Flow', 'image': 'https://assets.coingecko.com/coins/i
 mages/13446/large/5f6294c0c7a8cda55cb1c936_Flow_Wordmark.png?1696513210',
 'current_price': 0.721664, 'market_cap': 1073446308, 'market_cap_rank': 64,
 'fully_diluted_valuation': 1073446308, 'total_volume': 38512783, 'high_24h':
 0.755871, 'low_24h': 0.709836, 'price_change_24h': -0.03218600611802602,
 'price_change_percentage_24h': -4.26955, 'market_cap_change_24h':
 -47736357.47570896, 'market_cap_change_percentage_24h': -4.25768,
 'circulating_supply': 1486463326.0, 'total_supply': 1486463325.89509,
 'max_supply': 1486463325.89509, 'ath': 42.4, 'ath_change_percentage': -98.27837,
 'ath_date': '2021-04-05T13:49:10.098Z', 'atl': 0.391969,
 'atl_change_percentage': 86.21972, 'atl_date': '2023-09-11T19:41:06.528Z',
 'roi': None, 'last_updated': '2024-01-31T20:17:13.214Z'}, {'id': 'osmosis',
 'symbol': 'osmo', 'name': 'Osmosis', 'image':
 'https://assets.coingecko.com/coins/images/16724/large/osmo.png?1696516298',
 'current_price': 1.62, 'market_cap': 1024761400, 'market_cap_rank': 66,
 'fully_diluted_valuation': 1617874960, 'total_volume': 33347209, 'high_24h':
 1.72, 'low_24h': 1.6, 'price_change_24h': -0.09113356691557217,
 'price_change_percentage_24h': -5.32981, 'market_cap_change_24h':
 -58038065.77968049, 'market_cap_change_percentage_24h': -5.36,
 'circulating_supply': 633386517.0, 'total_supply': 999979298.0, 'max_supply':
 1000000000.0, 'ath': 11.25, 'ath_change_percentage': -85.53673, 'ath_date':
 '2022-03-04T05:12:18.707Z', 'atl': 0.224523, 'atl_change_percentage': 624.64053,
 'atl_date': '2023-10-19T17:45:36.695Z', 'roi': None, 'last_updated':
 '2024-01-31T20:17:15.413Z'}, {'id': 'astar', 'symbol': 'astr', 'name': 'Astar',
 'image':
 'https://assets.coingecko.com/coins/images/22617/large/astr.png?1696521933',
 'current_price': 0.181107, 'market_cap': 1020260913, 'market_cap_rank': 70,
 'fully_diluted_valuation': 1538188466, 'total_volume': 35005744, 'high_24h':
 0.186433, 'low_24h': 0.175158, 'price_change_24h': -0.003744773397610951,
 'price_change_percentage_24h': -2.02582, 'market_cap_change_24h':
 -4850400.194305658, 'market_cap_change_percentage_24h': -0.47316,
 'circulating_supply': 5555019193.0, 'total_supply': 8375021737.0, 'max_supply':
 None, 'ath': 0.421574, 'ath_change_percentage': -56.75982, 'ath_date':
 '2022-01-17T13:34:36.289Z', 'atl': 0.03269521, 'atl_change_percentage':

457.54079, 'atl_date': '2022-10-13T13:05:41.982Z', 'roi': None, 'last_updated': '2024-01-31T20:17:25.743Z'}, {'id': 'havven', 'symbol': 'snx', 'name': 'Synthetix Network', 'image': 'https://assets.coingecko.com/coins/images/3406/large/SNX.png?1696504103', 'current_price': 3.11, 'market_cap': 1015895217, 'market_cap_rank': 67, 'fully_diluted_valuation': 1017209087, 'total_volume': 25866987, 'high_24h': 3.28, 'low_24h': 3.06, 'price_change_24h': -0.17222839450756622, 'price_change_percentage_24h': -5.25381, 'market_cap_change_24h': -59906641.924346685, 'market_cap_change_percentage_24h': -5.56856, 'circulating_supply': 327769196.13952357, 'total_supply': 328193104.088774, 'max_supply': 328193104.088774, 'ath': 28.53, 'ath_change_percentage': -89.03079, 'ath_date': '2021-02-14T01:12:38.505Z', 'atl': 0.0347864, 'atl_change_percentage': 8897.09959, 'atl_date': '2019-01-06T00:00:00.000Z', 'roi': {'times': 5.21186100910856, 'currency': 'usd', 'percentage': 521.186100910856}, 'last_updated': '2024-01-31T20:17:10.333Z'}, {'id': 'fantom', 'symbol': 'ftm', 'name': 'Fantom', 'image': 'https://assets.coingecko.com/coins/images/4001/large/Fantom_round.png?1696504642', 'current_price': 0.362219, 'market_cap': 1011926855, 'market_cap_rank': 68, 'fully_diluted_valuation': 1145965132, 'total_volume': 101943657, 'high_24h': 0.389402, 'low_24h': 0.355783, 'price_change_24h': -0.0257080760433252, 'price_change_percentage_24h': -6.62703, 'market_cap_change_24h': -77820056.3450464, 'market_cap_change_percentage_24h': -7.14111, 'circulating_supply': 2803634835.52659, 'total_supply': 3175000000.0, 'max_supply': 3175000000.0, 'ath': 3.46, 'ath_change_percentage': -89.4222, 'ath_date': '2021-10-28T05:19:39.845Z', 'atl': 0.00190227, 'atl_change_percentage': 19131.81091, 'atl_date': '2020-03-13T02:25:38.280Z', 'roi': {'times': 11.07397611591603, 'currency': 'usd', 'percentage': 1107.397611591603}, 'last_updated': '2024-01-31T20:17:03.252Z'}, {'id': 'dydx-chain', 'symbol': 'dydx', 'name': 'dYdX', 'image': 'https://assets.coingecko.com/coins/images/32594/large/dydx.png?1698673495', 'current_price': 2.69, 'market_cap': 1008047732, 'market_cap_rank': 69, 'fully_diluted_valuation': 1844979479, 'total_volume': 16180465, 'high_24h': 2.88, 'low_24h': 2.64, 'price_change_24h': -0.1824830720298949, 'price_change_percentage_24h': -6.36037, 'market_cap_change_24h': -82556548.24533308, 'market_cap_change_percentage_24h': -7.5698, 'circulating_supply': 377821714.5, 'total_supply': 691508237.0, 'max_supply': 1000000000.0, 'ath': 3.73, 'ath_change_percentage': -28.4015, 'ath_date': '2023-12-03T23:23:34.201Z', 'atl': 2.3, 'atl_change_percentage': 16.0985, 'atl_date': '2024-01-03T12:14:30.340Z', 'roi': None, 'last_updated': '2024-01-31T20:17:19.311Z'}, {'id': 'the-sandbox', 'symbol': 'sand', 'name': 'The Sandbox', 'image': 'https://assets.coingecko.com/coins/images/12129/large/sandbox_logo.jpg?1696511971', 'current_price': 0.445099, 'market_cap': 992815362, 'market_cap_rank': 71, 'fully_diluted_valuation': 1331011123, 'total_volume': 85736822, 'high_24h': 0.466028, 'low_24h': 0.436521, 'price_change_24h': -0.019930143918354903, 'price_change_percentage_24h': -4.28578, 'market_cap_change_24h': -47570552.984678745, 'market_cap_change_percentage_24h': -4.57239, 'circulating_supply': 2237731926.2233224, 'total_supply': 3000000000.0, 'max_supply': 3000000000.0,

```

'ath': 8.4, 'ath_change_percentage': -94.65949, 'ath_date':
'2021-11-25T06:04:40.957Z', 'atl': 0.02897764, 'atl_change_percentage':
1447.5088, 'atl_date': '2020-11-04T15:59:14.441Z', 'roi': None, 'last_updated':
'2024-01-31T20:17:20.125Z'}, {'id': 'theta-token', 'symbol': 'theta', 'name':
'Theta Network', 'image':
'https://assets.coingecko.com/coins/images/2538/large/theta-token-
logo.png?1696503349', 'current_price': 0.977026, 'market_cap': 973762927,
'market_cap_rank': 72, 'fully_diluted_valuation': 973762927, 'total_volume':
19723343, 'high_24h': 1.029, 'low_24h': 0.960684, 'price_change_24h':
-0.05046510853530939, 'price_change_percentage_24h': -4.91149,
'market_cap_change_24h': -54053927.25758648, 'market_cap_change_percentage_24h':
-5.2591, 'circulating_supply': 1000000000.0, 'total_supply': 1000000000.0,
'max_supply': 1000000000.0, 'ath': 15.72, 'ath_change_percentage': -93.71903,
'ath_date': '2021-04-16T13:15:11.190Z', 'atl': 0.04039979,
'atl_change_percentage': 2343.95121, 'atl_date': '2020-03-13T02:24:16.483Z',
'roi': {'times': 5.513505795382772, 'currency': 'usd', 'percentage':
551.3505795382773}, 'last_updated': '2024-01-31T20:17:23.681Z'}, {'id': 'axie-
infinity', 'symbol': 'axs', 'name': 'Axie Infinity', 'image': 'https://assets.co
ingecko.com/coins/images/13029/large/axie_infinity_logo.png?1696512817',
'current_price': 7.02, 'market_cap': 954157476, 'market_cap_rank': 74,
'fully_diluted_valuation': 1885614733, 'total_volume': 88046932, 'high_24h':
7.55, 'low_24h': 6.96, 'price_change_24h': -0.529383131172934,
'price_change_percentage_24h': -7.01393, 'market_cap_change_24h':
-74431472.45989954, 'market_cap_change_percentage_24h': -7.23627,
'circulating_supply': 136625215.077578, 'total_supply': 270000000.0,
'max_supply': 270000000.0, 'ath': 164.9, 'ath_change_percentage': -95.71759,
'ath_date': '2021-11-06T19:29:29.482Z', 'atl': 0.123718,
'atl_change_percentage': 5607.80395, 'atl_date': '2020-11-06T08:05:43.662Z',
'roi': None, 'last_updated': '2024-01-31T20:17:19.236Z'}, {'id': 'whitebit',
'symbol': 'wbt', 'name': 'WhiteBIT Coin', 'image': 'https://assets.coingecko.com
/coins/images/27045/large/wbt_token.png?1696526096', 'current_price': 6.46,
'market_cap': 927152779, 'market_cap_rank': 75, 'fully_diluted_valuation':
2315192084, 'total_volume': 7019772, 'high_24h': 6.5, 'low_24h': 6.33,
'price_change_24h': 0.090972, 'price_change_percentage_24h': 1.42904,
'market_cap_change_24h': 8967523, 'market_cap_change_percentage_24h': 0.97666,
'circulating_supply': 144118517.10815412, 'total_supply': 359878175.0,
'max_supply': 400000000.0, 'ath': 14.64, 'ath_change_percentage': -55.90407,
'ath_date': '2022-10-28T12:32:18.119Z', 'atl': 3.06, 'atl_change_percentage':
110.91702, 'atl_date': '2023-02-13T19:01:21.899Z', 'roi': None, 'last_updated':
'2024-01-31T20:16:49.794Z'}, {'id': 'kucoin-shares', 'symbol': 'kcs', 'name':
'KuCoin', 'image':
'https://assets.coingecko.com/coins/images/1047/large/sa9z79.png?1696502152',
'current_price': 9.58, 'market_cap': 919957588, 'market_cap_rank': 76,
'fully_diluted_valuation': 1372801341, 'total_volume': 261131, 'high_24h': 9.99,
'low_24h': 9.39, 'price_change_24h': -0.3842022858030596,
'price_change_percentage_24h': -3.85593, 'market_cap_change_24h':
-41768036.78943503, 'market_cap_change_percentage_24h': -4.34303,
'circulating_supply': 96496827.2890287, 'total_supply': 143996827.288945,

```

'max_supply': None, 'ath': 28.83, 'ath_change_percentage': -66.68751,
 'ath_date': '2021-12-01T15:09:35.541Z', 'atl': 0.342863,
 'atl_change_percentage': 2701.10505, 'atl_date': '2019-02-07T00:00:00.000Z',
 'roi': None, 'last_updated': '2024-01-31T20:17:07.786Z'}, {'id': 'beam-2',
 'symbol': 'beam', 'name': 'Beam', 'image':
 'https://assets.coingecko.com/coins/images/32417/large/chain-
 logo.png?1698114384', 'current_price': 0.01757052, 'market_cap': 897270348,
 'market_cap_rank': 77, 'fully_diluted_valuation': 1098833548, 'total_volume':
 14563854, 'high_24h': 0.01911743, 'low_24h': 0.01733456, 'price_change_24h':
 -0.001498414010322826, 'price_change_percentage_24h': -7.85788,
 'market_cap_change_24h': -68688840.99372542, 'market_cap_change_percentage_24h':
 -7.11095, 'circulating_supply': 51112794995.4844, 'total_supply':
 62594795429.7398, 'max_supply': 62594795429.7398, 'ath': 0.02720031,
 'ath_change_percentage': -35.28291, 'ath_date': '2023-12-14T05:24:58.029Z',
 'atl': 0.0043383, 'atl_change_percentage': 305.76368, 'atl_date':
 '2023-10-29T08:20:14.064Z', 'roi': None, 'last_updated':
 '2024-01-31T20:17:25.347Z'}, {'id': 'chiliz', 'symbol': 'chz', 'name': 'Chiliz',
 'image': 'https://assets.coingecko.com/coins/images/8834/large/CHZ_Token_updated.
 png?1696508986', 'current_price': 0.099228, 'market_cap': 878783843,
 'market_cap_rank': 78, 'fully_diluted_valuation': 878783843, 'total_volume':
 68515895, 'high_24h': 0.104071, 'low_24h': 0.097656, 'price_change_24h':
 -0.004735313156914223, 'price_change_percentage_24h': -4.55479,
 'market_cap_change_24h': -45928231.44306779, 'market_cap_change_percentage_24h':
 -4.96676, 'circulating_supply': 8888888888.0, 'total_supply': 8888888888.0,
 'max_supply': 8888888888.0, 'ath': 0.878633, 'ath_change_percentage': -88.60685,
 'ath_date': '2021-03-13T08:04:21.200Z', 'atl': 0.00410887,
 'atl_change_percentage': 2336.28837, 'atl_date': '2019-09-28T00:00:00.000Z',
 'roi': {'times': 3.510368474417016, 'currency': 'usd', 'percentage':
 351.0368474417016}, 'last_updated': '2024-01-31T20:17:19.348Z'}, {'id': 'tezos',
 'symbol': 'xtz', 'name': 'Tezos', 'image':
 'https://assets.coingecko.com/coins/images/976/large/Tezos-logo.png?1696502091',
 'current_price': 0.977726, 'market_cap': 877931054, 'market_cap_rank': 79,
 'fully_diluted_valuation': 965709797, 'total_volume': 34088805, 'high_24h':
 0.999546, 'low_24h': 0.95727, 'price_change_24h': -0.018657943111630937,
 'price_change_percentage_24h': -1.87257, 'market_cap_change_24h':
 -20099015.430385232, 'market_cap_change_percentage_24h': -2.23812,
 'circulating_supply': 900122644.917447, 'total_supply': 990122093.034962,
 'max_supply': None, 'ath': 9.12, 'ath_change_percentage': -89.17908, 'ath_date':
 '2021-10-04T00:41:18.025Z', 'atl': 0.350476, 'atl_change_percentage': 181.45771,
 'atl_date': '2018-12-07T00:00:00.000Z', 'roi': {'times': 1.0802676586810935,
 'currency': 'usd', 'percentage': 108.02676586810936}, 'last_updated':
 '2024-01-31T20:17:20.012Z'}, {'id': 'jupiter-exchange-solana', 'symbol': 'jup',
 'name': 'Jupiter', 'image':
 'https://assets.coingecko.com/coins/images/34188/large/jup.png?1704266489',
 'current_price': 0.637443, 'market_cap': 867212905, 'market_cap_rank': 73,
 'fully_diluted_valuation': 6423799296, 'total_volume': 433390349, 'high_24h':
 2.0, 'low_24h': 0.637596, 'price_change_24h': -1.362570188721904,
 'price_change_percentage_24h': -68.12806, 'market_cap_change_24h':

-1830071599.9245343, 'market_cap_change_percentage_24h': -67.84867,
'circulating_supply': 1350000000.0, 'total_supply': 10000000000.0, 'max_supply':
10000000000.0, 'ath': 2.0, 'ath_change_percentage': -68.00751, 'ath_date':
'2024-01-31T15:02:47.304Z', 'atl': 0.638161, 'atl_change_percentage': 0.26523,
'atl_date': '2024-01-31T15:14:59.624Z', 'roi': None, 'last_updated':
'2024-01-31T20:17:01.526Z'}, {'id': 'wemix-token', 'symbol': 'wemix', 'name':
'WEMIX', 'image': 'https://assets.coingecko.com/coins/images/12998/large/wemixco
in_color_200.png?1696512788', 'current_price': 2.41, 'market_cap': 856277608,
'market_cap_rank': 80, 'fully_diluted_valuation': 2292193898, 'total_volume':
3876592, 'high_24h': 2.56, 'low_24h': 2.41, 'price_change_24h':
-0.12921488599120723, 'price_change_percentage_24h': -5.08425,
'market_cap_change_24h': -46122822.0439893, 'market_cap_change_percentage_24h':
-5.11113, 'circulating_supply': 355447745.235849, 'total_supply':
951510540.572437, 'max_supply': 1093792286.0, 'ath': 24.71,
'ath_change_percentage': -90.21518, 'ath_date': '2021-11-21T17:33:44.178Z',
'atl': 0.128398, 'atl_change_percentage': 1783.20789, 'atl_date':
'2021-06-22T12:52:49.089Z', 'roi': None, 'last_updated':
'2024-01-31T20:17:13.506Z'}, {'id': 'cheelee', 'symbol': 'cheel', 'name':
'Cheelee', 'image': 'https://assets.coingecko.com/coins/images/28573/large/CHEEL
%D1%82%D0%BE%D0%BD%D0%BA%D0%B0%D1%8F%D0%BE%D0%B1%D0%B2%D0%BE%D0%B4%D0%BA%D0%B0
_%283%29.png?1696527561', 'current_price': 15.91, 'market_cap': 852322855,
'market_cap_rank': 81, 'fully_diluted_valuation': 15830601068, 'total_volume':
6019614, 'high_24h': 16.14, 'low_24h': 15.72, 'price_change_24h':
-0.1739996872856402, 'price_change_percentage_24h': -1.08157,
'market_cap_change_24h': -10920735.18697524, 'market_cap_change_percentage_24h':
-1.26508, 'circulating_supply': 53840208.0656888, 'total_supply': 1000000000.0,
'max_supply': 1000000000.0, 'ath': 17.32, 'ath_change_percentage': -8.18285,
'ath_date': '2023-07-16T21:40:08.888Z', 'atl': 3.44, 'atl_change_percentage':
362.33185, 'atl_date': '2023-02-13T02:53:08.933Z', 'roi': None, 'last_updated':
'2024-01-31T20:16:49.154Z'}, {'id': 'apecoin', 'symbol': 'ape', 'name':
'ApeCoin', 'image':
'https://assets.coingecko.com/coins/images/24383/large/apecoin.jpg?1696523566',
'current_price': 1.42, 'market_cap': 850875844, 'market_cap_rank': 82,
'fully_diluted_valuation': 1406648545, 'total_volume': 66935718, 'high_24h':
1.44, 'low_24h': 1.37, 'price_change_24h': -0.01976754834511052,
'price_change_percentage_24h': -1.37613, 'market_cap_change_24h':
-17870815.598719, 'market_cap_change_percentage_24h': -2.05708,
'circulating_supply': 604895833.0, 'total_supply': 1000000000.0, 'max_supply':
1000000000.0, 'ath': 26.7, 'ath_change_percentage': -94.70934, 'ath_date':
'2022-04-28T21:44:21.164Z', 'atl': 1.008, 'atl_change_percentage': 40.18001,
'atl_date': '2023-10-10T20:51:07.411Z', 'roi': None, 'last_updated':
'2024-01-31T20:17:24.491Z'}, {'id': 'conflux-token', 'symbol': 'cfx', 'name':
'Conflux', 'image':
'https://assets.coingecko.com/coins/images/13079/large/3vuYMBjN.png?1696512867',
'current_price': 0.230605, 'market_cap': 841395615, 'market_cap_rank': 85,
'fully_diluted_valuation': 1258085175, 'total_volume': 103431569, 'high_24h':
0.233303, 'low_24h': 0.216867, 'price_change_24h': 0.00266611,
'price_change_percentage_24h': 1.16966, 'market_cap_change_24h': 6891196,

'market_cap_change_percentage_24h': 0.82578, 'circulating_supply':
 3653725751.93531, 'total_supply': 5463194183.5948, 'max_supply': None, 'ath':
 1.7, 'ath_change_percentage': -86.35292, 'ath_date': '2021-03-27T03:43:35.178Z',
 'atl': 0.02199898, 'atl_change_percentage': 955.12112, 'atl_date':
 '2022-12-30T08:16:30.345Z', 'roi': None, 'last_updated':
 '2024-01-31T20:17:21.732Z'}, {'id': 'dydx', 'symbol': 'ethdydx', 'name': 'dYdX',
 'image':
 'https://assets.coingecko.com/coins/images/17500/large/hjnIm9bV.jpg?1696517040',
 'current_price': 2.67, 'market_cap': 835597289, 'market_cap_rank': 83,
 'fully_diluted_valuation': 1427784538, 'total_volume': 92462515, 'high_24h':
 2.87, 'low_24h': 2.63, 'price_change_24h': -0.19955401364692715,
 'price_change_percentage_24h': -6.94488, 'market_cap_change_24h':
 -67090878.53242314, 'market_cap_change_percentage_24h': -7.43234,
 'circulating_supply': 313714639.2520706, 'total_supply': 536043997.31,
 'max_supply': 536043997.31, 'ath': 27.86, 'ath_change_percentage': -90.35053,
 'ath_date': '2021-09-30T01:23:43.570Z', 'atl': 1.011, 'atl_change_percentage':
 166.01812, 'atl_date': '2022-06-18T20:55:50.603Z', 'roi': None, 'last_updated':
 '2024-01-31T20:17:18.611Z'}, {'id': 'bitget-token', 'symbol': 'bgb', 'name':
 'Bitget Token', 'image': 'https://assets.coingecko.com/coins/images/11610/large/
 icon_colour.png?1696511504', 'current_price': 0.597263, 'market_cap': 832726326,
 'market_cap_rank': 84, 'fully_diluted_valuation': 1189608188, 'total_volume':
 25175474, 'high_24h': 0.603516, 'low_24h': 0.592744, 'price_change_24h':
 -0.002432124165235528, 'price_change_percentage_24h': -0.40556,
 'market_cap_change_24h': -6524907.941678166, 'market_cap_change_percentage_24h':
 -0.77747, 'circulating_supply': 1400001000.0, 'total_supply': 2000000000.0,
 'max_supply': 2000000000.0, 'ath': 0.701227, 'ath_change_percentage': -14.78527,
 'ath_date': '2023-12-19T07:13:51.026Z', 'atl': 0.0142795,
 'atl_change_percentage': 4084.66249, 'atl_date': '2020-06-25T04:17:05.895Z',
 'roi': None, 'last_updated': '2024-01-31T20:17:07.750Z'}, {'id': 'ronin',
 'symbol': 'ron', 'name': 'Ronin', 'image': 'https://assets.coingecko.com/coins/i
 mages/20009/large/Ronin_Mark_Blue.png?1696519431', 'current_price': 2.82,
 'market_cap': 823618193, 'market_cap_rank': 86, 'fully_diluted_valuation':
 2820089767, 'total_volume': 24977188, 'high_24h': 2.89, 'low_24h': 2.67,
 'price_change_24h': 0.086507, 'price_change_percentage_24h': 3.16668,
 'market_cap_change_24h': 26037424, 'market_cap_change_percentage_24h': 3.26455,
 'circulating_supply': 292053892.287891, 'total_supply': 1000000000.0,
 'max_supply': 1000000000.0, 'ath': 4.29, 'ath_change_percentage': -34.11038,
 'ath_date': '2022-01-27T13:14:36.500Z', 'atl': 0.196601,
 'atl_change_percentage': 1339.23246, 'atl_date': '2022-11-21T19:36:31.487Z',
 'roi': None, 'last_updated': '2024-01-31T20:17:25.716Z'}, {'id': 'decentraland',
 'symbol': 'mana', 'name': 'Decentraland', 'image':
 'https://assets.coingecko.com/coins/images/878/large/decentraland-
 mana.png?1696502010', 'current_price': 0.437335, 'market_cap': 806172847,
 'market_cap_rank': 87, 'fully_diluted_valuation': 957302956, 'total_volume':
 64931303, 'high_24h': 0.455948, 'low_24h': 0.43121, 'price_change_24h':
 -0.01817796355913809, 'price_change_percentage_24h': -3.99066,
 'market_cap_change_24h': -36545214.777201176,
 'market_cap_change_percentage_24h': -4.33659, 'circulating_supply':

1846940522.2078757, 'total_supply': 2193179327.32015, 'max_supply': 2193179327.32015, 'ath': 5.85, 'ath_change_percentage': -92.46153, 'ath_date': '2021-11-25T10:04:18.534Z', 'atl': 0.00923681, 'atl_change_percentage': 4675.0526, 'atl_date': '2017-10-31T00:00:00.000Z', 'roi': {'times': 20.86673758521523, 'currency': 'usd', 'percentage': 2086.673758521523}, 'last_updated': '2024-01-31T20:17:20.222Z'}, {'id': 'blur', 'symbol': 'blur', 'name': 'Blur', 'image': 'https://assets.coingecko.com/coins/images/28453/large/blur.png?1696527448', 'current_price': 0.611856, 'market_cap': 787382021, 'market_cap_rank': 91, 'fully_diluted_valuation': 1850403706, 'total_volume': 61149147, 'high_24h': 0.651511, 'low_24h': 0.603434, 'price_change_24h': -0.036395074990822174, 'price_change_percentage_24h': -5.61435, 'market_cap_change_24h': -42036233.46432197, 'market_cap_change_percentage_24h': -5.06816, 'circulating_supply': 1276557139.45967, 'total_supply': 3000000000.0, 'max_supply': 3000000000.0, 'ath': 5.02, 'ath_change_percentage': -87.76168, 'ath_date': '2023-02-14T17:33:55.928Z', 'atl': 0.153143, 'atl_change_percentage': 300.86908, 'atl_date': '2023-10-12T17:10:39.401Z', 'roi': None, 'last_updated': '2024-01-31T20:17:12.586Z'}, {'id': 'bittorrent', 'symbol': 'btt', 'name': 'BitTorrent', 'image': 'https://assets.coingecko.com/coins/images/22457/large/btt_logo.png?1696521780', 'current_price': 8.15783e-07, 'market_cap': 786499086, 'market_cap_rank': 88, 'fully_diluted_valuation': 804169344, 'total_volume': 26344063, 'high_24h': 8.59763e-07, 'low_24h': 8.0512e-07, 'price_change_24h': -4.3257368904e-08, 'price_change_percentage_24h': -5.03555, 'market_cap_change_24h': -44877440.01598585, 'market_cap_change_percentage_24h': -5.39797, 'circulating_supply': 968246428571000.0, 'total_supply': 990000000000000.0, 'max_supply': 990000000000000.0, 'ath': 3.43e-06, 'ath_change_percentage': -76.16163, 'ath_date': '2022-01-21T04:00:31.909Z', 'atl': 3.65368e-07, 'atl_change_percentage': 123.87732, 'atl_date': '2023-10-13T05:10:41.241Z', 'roi': None, 'last_updated': '2024-01-31T20:17:23.417Z'}, {'id': 'eos', 'symbol': 'eos', 'name': 'EOS', 'image': 'https://assets.coingecko.com/coins/images/738/large/eos-eos-logo.png?1696501893', 'current_price': 0.692338, 'market_cap': 786092640, 'market_cap_rank': 90, 'fully_diluted_valuation': None, 'total_volume': 99605181, 'high_24h': 0.716039, 'low_24h': 0.682849, 'price_change_24h': -0.02269123012359564, 'price_change_percentage_24h': -3.17347, 'market_cap_change_24h': -28127548.750242233, 'market_cap_change_percentage_24h': -3.45454, 'circulating_supply': 1137454554.4429, 'total_supply': None, 'max_supply': None, 'ath': 22.71, 'ath_change_percentage': -96.92604, 'ath_date': '2018-04-29T07:50:33.540Z', 'atl': 0.5024, 'atl_change_percentage': 38.96015, 'atl_date': '2017-10-23T00:00:00.000Z', 'roi': {'times': -0.30066917292324646, 'currency': 'usd', 'percentage': -30.066917292324646}, 'last_updated': '2024-01-31T20:17:24.077Z'}, {'id': 'manta-network', 'symbol': 'manta', 'name': 'Manta Network', 'image': 'https://assets.coingecko.com/coins/images/34289/large/manta.jpg?1704468717', 'current_price': 3.13, 'market_cap': 785571786, 'market_cap_rank': 89, 'fully_diluted_valuation': 3129768072, 'total_volume': 328168766, 'high_24h':

3.58, 'low_24h': 3.1, 'price_change_24h': -0.39428393734920153,
 'price_change_percentage_24h': -11.2016, 'market_cap_change_24h':
 -97455844.2268374, 'market_cap_change_percentage_24h': -11.03656,
 'circulating_supply': 251000000.0, 'total_supply': 1000000000.0, 'max_supply':
 1000000000.0, 'ath': 3.83, 'ath_change_percentage': -18.33996, 'ath_date':
 '2024-01-28T01:49:54.287Z', 'atl': 2.02, 'atl_change_percentage': 55.17112,
 'atl_date': '2024-01-18T10:04:12.606Z', 'roi': None, 'last_updated':
 '2024-01-31T20:17:15.650Z'}, {'id': 'kava', 'symbol': 'kava', 'name': 'Kava',
 'image':
 'https://assets.coingecko.com/coins/images/9761/large/kava.png?1696509822',
 'current_price': 0.717583, 'market_cap': 776384436, 'market_cap_rank': 93,
 'fully_diluted_valuation': 776384436, 'total_volume': 22427181, 'high_24h':
 0.745729, 'low_24h': 0.714892, 'price_change_24h': -0.028146570324715903,
 'price_change_percentage_24h': -3.77437, 'market_cap_change_24h':
 -32331682.5880605, 'market_cap_change_percentage_24h': -3.9979,
 'circulating_supply': 1082861778.0, 'total_supply': 1082861778.0, 'max_supply':
 None, 'ath': 9.12, 'ath_change_percentage': -92.07527, 'ath_date':
 '2021-08-30T11:10:02.948Z', 'atl': 0.287137, 'atl_change_percentage': 151.71084,
 'atl_date': '2020-03-13T02:24:16.835Z', 'roi': None, 'last_updated':
 '2024-01-31T20:17:25.031Z'}, {'id': 'neo', 'symbol': 'neo', 'name': 'NEO',
 'image': 'https://assets.coingecko.com/coins/images/480/large/NEO_512_512.png?16
 96501735', 'current_price': 10.88, 'market_cap': 766650184, 'market_cap_rank':
 94, 'fully_diluted_valuation': 1086984523, 'total_volume': 84906079, 'high_24h':
 12.09, 'low_24h': 10.78, 'price_change_24h': -0.5118814347244047,
 'price_change_percentage_24h': -4.4918, 'market_cap_change_24h':
 -38083882.97764015, 'market_cap_change_percentage_24h': -4.73248,
 'circulating_supply': 70530000.0, 'total_supply': 100000000.0, 'max_supply':
 None, 'ath': 198.38, 'ath_change_percentage': -94.47398, 'ath_date':
 '2018-01-15T00:00:00.000Z', 'atl': 0.078349, 'atl_change_percentage':
 13891.93833, 'atl_date': '2016-10-21T00:00:00.000Z', 'roi': {'times':
 301.33385160854914, 'currency': 'usd', 'percentage': 30133.385160854916},
 'last_updated': '2024-01-31T20:17:16.394Z'}, {'id': 'iota', 'symbol': 'iota',
 'name': 'IOTA', 'image':
 'https://assets.coingecko.com/coins/images/692/large/IOTA_Swirl.png?1696501881',
 'current_price': 0.243213, 'market_cap': 762337442, 'market_cap_rank': 96,
 'fully_diluted_valuation': 1125879175, 'total_volume': 14532396, 'high_24h':
 0.255905, 'low_24h': 0.238482, 'price_change_24h': -0.012298066156867769,
 'price_change_percentage_24h': -4.81312, 'market_cap_change_24h':
 -34264521.59273374, 'market_cap_change_percentage_24h': -4.30134,
 'circulating_supply': 3114679008.0, 'total_supply': 4600000000.0, 'max_supply':
 4600000000.0, 'ath': 5.25, 'ath_change_percentage': -95.33263, 'ath_date':
 '2017-12-19T00:00:00.000Z', 'atl': 0.081637, 'atl_change_percentage': 200.08325,
 'atl_date': '2020-03-13T02:22:41.168Z', 'roi': {'times': 3.2321586509015483,
 'currency': 'btc', 'percentage': 323.21586509015486}, 'last_updated':
 '2024-01-31T20:17:16.501Z'}, {'id': 'flare-networks', 'symbol': 'flr', 'name':
 'Flare', 'image': 'https://assets.coingecko.com/coins/images/28624/large/FLR-
 icon200x200.png?1696527609', 'current_price': 0.02343056, 'market_cap':
 760359186, 'market_cap_rank': 95, 'fully_diluted_valuation': 2375648742,

'total_volume': 14047680, 'high_24h': 0.02411046, 'low_24h': 0.02270223,
 'price_change_24h': 0.00015583, 'price_change_percentage_24h': 0.66951,
 'market_cap_change_24h': 1188090, 'market_cap_change_percentage_24h': 0.1565,
 'circulating_supply': 32510173772.6477, 'total_supply': 101567913009.677,
 'max_supply': None, 'ath': 0.150073, 'ath_change_percentage': -84.41615,
 'ath_date': '2023-01-10T03:14:05.921Z', 'atl': 0.00827405,
 'atl_change_percentage': 182.65639, 'atl_date': '2023-10-19T03:35:41.663Z',
 'roi': None, 'last_updated': '2024-01-31T20:17:14.816Z'}, {'id': 'frax-share',
 'symbol': 'fxs', 'name': 'Frax Share', 'image': 'https://assets.coingecko.com/coins/images/13423/large/Frax_Shares_icon.png?1696513183', 'current_price': 9.83,
 'market_cap': 748395685, 'market_cap_rank': 92, 'fully_diluted_valuation':
 974999600, 'total_volume': 57318687, 'high_24h': 10.6, 'low_24h': 9.76,
 'price_change_24h': -0.7767639993798969, 'price_change_percentage_24h':
 -7.32552, 'market_cap_change_24h': -65123084.90355599,
 'market_cap_change_percentage_24h': -8.00511, 'circulating_supply':
 76514083.8818445, 'total_supply': 99681495.5911336, 'max_supply':
 99681495.5911336, 'ath': 42.8, 'ath_change_percentage': -77.02652, 'ath_date':
 '2022-01-12T15:22:27.465Z', 'atl': 1.5, 'atl_change_percentage': 554.12844,
 'atl_date': '2021-06-25T16:50:51.447Z', 'roi': None, 'last_updated':
 '2024-01-31T20:17:24.689Z'}, {'id': 'usdd', 'symbol': 'usdd', 'name': 'USDD',
 'image':
 'https://assets.coingecko.com/coins/images/25380/large/UUSD.jpg?1696524513',
 'current_price': 0.995649, 'market_cap': 720610480, 'market_cap_rank': 99,
 'fully_diluted_valuation': None, 'total_volume': 11431757, 'high_24h': 0.997569,
 'low_24h': 0.989797, 'price_change_24h': 0.00056315,
 'price_change_percentage_24h': 0.05659, 'market_cap_change_24h':
 -328411.3787051439, 'market_cap_change_percentage_24h': -0.04555,
 'circulating_supply': 725332033.742248, 'total_supply': None, 'max_supply':
 None, 'ath': 1.052, 'ath_change_percentage': -5.78806, 'ath_date':
 '2023-10-23T22:45:25.398Z', 'atl': 0.928067, 'atl_change_percentage': 6.77454,
 'atl_date': '2022-06-19T16:15:11.558Z', 'roi': None, 'last_updated':
 '2024-01-31T20:17:15.789Z'}, {'id': 'frax-ether', 'symbol': 'frxeth', 'name':
 'Frax Ether', 'image': 'https://assets.coingecko.com/coins/images/28284/large/frxETH_icon.png?1696527284', 'current_price': 2311.19, 'market_cap': 718153334,
 'market_cap_rank': 98, 'fully_diluted_valuation': 718153334, 'total_volume':
 4729970, 'high_24h': 2375.52, 'low_24h': 2277.5, 'price_change_24h':
 -46.32197861792474, 'price_change_percentage_24h': -1.96487,
 'market_cap_change_24h': -15244061.79381764, 'market_cap_change_percentage_24h':
 -2.07855, 'circulating_supply': 312131.474362907, 'total_supply':
 310231.474362907, 'max_supply': None, 'ath': 2672.41, 'ath_change_percentage':
 -13.80248, 'ath_date': '2024-01-12T16:49:45.243Z', 'atl': 1137.25,
 'atl_change_percentage': 102.5547, 'atl_date': '2022-11-23T02:25:33.267Z',
 'roi': None, 'last_updated': '2024-01-31T20:17:20.125Z'}, {'id': 'gala',
 'symbol': 'gala', 'name': 'GALA', 'image':
 'https://assets.coingecko.com/coins/images/12493/large/GALA-COINGECKO.png?1696512310', 'current_price': 0.02209412, 'market_cap': 717958250,
 'market_cap_rank': 97, 'fully_diluted_valuation': 717952064, 'total_volume':
 56936272, 'high_24h': 0.02337767, 'low_24h': 0.02189959, 'price_change_24h':

```
-0.001234829291254076, 'price_change_percentage_24h': -5.29312,
'market_cap_change_24h': -42658545.75875366, 'market_cap_change_percentage_24h':
-5.60841, 'circulating_supply': 32575957048.8699, 'total_supply':
32575957048.8699, 'max_supply': 50000000000.0, 'ath': 0.824837,
'ath_change_percentage': -97.29944, 'ath_date': '2021-11-26T01:03:48.731Z',
'atl': 0.00013475, 'atl_change_percentage': 16430.82246, 'atl_date':
'2020-12-28T08:46:48.367Z', 'roi': None, 'last_updated':
'2024-01-31T20:17:22.011Z'}, {'id': 'klay-token', 'symbol': 'klay', 'name':
'Klaytn', 'image':
'https://assets.coingecko.com/coins/images/9672/large/klaytn.png?1696509742',
'current_price': 0.196161, 'market_cap': 681636372, 'market_cap_rank': 100,
'fully_diluted_valuation': 1151502183, 'total_volume': 18772345, 'high_24h':
0.206912, 'low_24h': 0.190882, 'price_change_24h': -0.0104526704526845,
'price_change_percentage_24h': -5.05903, 'market_cap_change_24h':
-38353291.28922975, 'market_cap_change_percentage_24h': -5.32692,
'circulating_supply': 3486649424.22865, 'total_supply': 5890067764.91025,
'max_supply': None, 'ath': 4.34, 'ath_change_percentage': -95.49115, 'ath_date':
'2021-03-30T03:44:28.828Z', 'atl': 0.06044, 'atl_change_percentage': 223.68668,
'atl_date': '2020-04-29T08:19:34.574Z', 'roi': None, 'last_updated':
'2024-01-31T20:17:17.964Z'}]
```

```
[123]: import json
```

```
json.dump(cc_data, open('/content/drive/MyDrive/AIS_DG/cc.json', 'w'))
```

```
[124]: cc_data[:10]
```

```
[124]: [{'id': 'bitcoin',
'symbol': 'btc',
'name': 'Bitcoin',
'image':
'https://assets.coingecko.com/coins/images/1/large/bitcoin.png?1696501400',
'current_price': 42886,
'market_cap': 838368145426,
'market_cap_rank': 1,
'fully_diluted_valuation': 897595286525,
'total_volume': 21822812951,
'high_24h': 43717,
'low_24h': 42410,
'price_change_24h': -684.4704503957328,
'price_change_percentage_24h': -1.57096,
'market_cap_change_24h': -15717311355.644043,
'market_cap_change_percentage_24h': -1.84025,
'circulating_supply': 19614331.0,
'total_supply': 21000000.0,
'max_supply': 21000000.0,
'ath': 69045,
```

```

    'ath_change_percentage': -37.24682,
    'ath_date': '2021-11-10T14:24:11.849Z',
    'atl': 67.81,
    'atl_change_percentage': 63796.81043,
    'atl_date': '2013-07-06T00:00:00.000Z',
    'roi': None,
    'last_updated': '2024-01-31T20:17:14.678Z'},
{'id': 'ethereum',
 'symbol': 'eth',
 'name': 'Ethereum',
 'image':
'https://assets.coingecko.com/coins/images/279/large/ethereum.png?1696501628',
 'current_price': 2302.18,
 'market_cap': 275903905958,
 'market_cap_rank': 2,
 'fully_diluted_valuation': 275903905958,
 'total_volume': 10698944994,
 'high_24h': 2385.34,
 'low_24h': 2282.14,
 'price_change_24h': -78.98697655622345,
 'price_change_percentage_24h': -3.31715,
 'market_cap_change_24h': -10154839948.63623,
 'market_cap_change_percentage_24h': -3.54991,
 'circulating_supply': 120182821.049024,
 'total_supply': 120182821.049024,
 'max_supply': None,
 'ath': 4878.26,
 'ath_change_percentage': -52.37031,
 'ath_date': '2021-11-10T14:24:19.604Z',
 'atl': 0.432979,
 'atl_change_percentage': 536531.3751,
 'atl_date': '2015-10-20T00:00:00.000Z',
 'roi': {'times': 70.77166703019178,
 'currency': 'btc',
 'percentage': 7077.166703019178},
 'last_updated': '2024-01-31T20:17:15.140Z'},
{'id': 'tether',
 'symbol': 'usdt',
 'name': 'Tether',
 'image':
'https://assets.coingecko.com/coins/images/325/large/Tether.png?1696501661',
 'current_price': 0.998104,
 'market_cap': 95723781277,
 'market_cap_rank': 3,
 'fully_diluted_valuation': 95723781277,
 'total_volume': 40193651300,
 'high_24h': 1.002,

```

```

'low_24h': 0.99485,
'price_change_24h': -0.002473295713631418,
'price_change_percentage_24h': -0.24719,
'market_cap_change_24h': -385474498.14645386,
'market_cap_change_percentage_24h': -0.40108,
'circulating_supply': 96219281549.4949,
'total_supply': 96219281549.4949,
'max_supply': None,
'ath': 1.32,
'ath_change_percentage': -24.48271,
'ath_date': '2018-07-24T00:00:00.000Z',
'atl': 0.572521,
'atl_change_percentage': 74.52037,
'atl_date': '2015-03-02T00:00:00.000Z',
'roi': None,
'last_updated': '2024-01-31T20:15:17.050Z'},
{'id': 'binancecoin',
'symbol': 'bnb',
'name': 'BNB',
'image': 'https://assets.coingecko.com/coins/images/825/large/bnb-
icon2_2x.png?1696501970',
'current_price': 302.32,
'market_cap': 46361104492,
'market_cap_rank': 4,
'fully_diluted_valuation': 46361104492,
'total_volume': 652594667,
'high_24h': 310.56,
'low_24h': 300.59,
'price_change_24h': -7.86103098899639,
'price_change_percentage_24h': -2.53436,
'market_cap_change_24h': -1347776852.1702728,
'market_cap_change_percentage_24h': -2.825,
'circulating_supply': 153856150.0,
'total_supply': 153856150.0,
'max_supply': 200000000.0,
'ath': 686.31,
'ath_change_percentage': -55.58551,
'ath_date': '2021-05-10T07:24:17.097Z',
'atl': 0.0398177,
'atl_change_percentage': 765437.95283,
'atl_date': '2017-10-19T00:00:00.000Z',
'roi': None,
'last_updated': '2024-01-31T20:17:06.148Z'},
{'id': 'solana',
'symbol': 'sol',
'name': 'Solana',
'image':

```

```

'https://assets.coingecko.com/coins/images/4128/large/solana.png?1696504756',
  'current_price': 99.2,
  'market_cap': 43266814955,
  'market_cap_rank': 5,
  'fully_diluted_valuation': 56436560955,
  'total_volume': 3641162032,
  'high_24h': 105.45,
  'low_24h': 97.8,
  'price_change_24h': -5.960725967199352,
  'price_change_percentage_24h': -5.66819,
  'market_cap_change_24h': -2611757669.3631363,
  'market_cap_change_percentage_24h': -5.69276,
  'circulating_supply': 435747756.743262,
  'total_supply': 568382449.24628,
  'max_supply': None,
  'ath': 259.96,
  'ath_change_percentage': -61.18572,
  'ath_date': '2021-11-06T21:54:35.825Z',
  'atl': 0.500801,
  'atl_change_percentage': 20047.97524,
  'atl_date': '2020-05-11T19:35:23.449Z',
  'roi': None,
  'last_updated': '2024-01-31T20:17:24.257Z'},
{'id': 'ripple',
  'symbol': 'xrp',
  'name': 'XRP',
  'image': 'https://assets.coingecko.com/coins/images/44/large/xrp-symbol-white-128.png?1696501442',
  'current_price': 0.507667,
  'market_cap': 27536942536,
  'market_cap_rank': 6,
  'fully_diluted_valuation': 50637007829,
  'total_volume': 1665333815,
  'high_24h': 0.514684,
  'low_24h': 0.498261,
  'price_change_24h': -0.007016517481078789,
  'price_change_percentage_24h': -1.36327,
  'market_cap_change_24h': -427533255.660759,
  'market_cap_change_percentage_24h': -1.52884,
  'circulating_supply': 54374512255.0,
  'total_supply': 99987956150.0,
  'max_supply': 100000000000.0,
  'ath': 3.4,
  'ath_change_percentage': -84.96847,
  'ath_date': '2018-01-07T00:00:00.000Z',
  'atl': 0.00268621,
  'atl_change_percentage': 18917.121,

```

```

    'atl_date': '2014-05-22T00:00:00.000Z',
    'roi': None,
    'last_updated': '2024-01-31T20:17:24.364Z'},
{'id': 'usd-coin',
 'symbol': 'usdc',
 'name': 'USDC',
 'image':
'https://assets.coingecko.com/coins/images/6319/large/usdc.png?1696506694',
 'current_price': 0.999113,
 'market_cap': 26766583031,
 'market_cap_rank': 7,
 'fully_diluted_valuation': 25365322676,
 'total_volume': 7390834534,
 'high_24h': 1.004,
 'low_24h': 0.994008,
 'price_change_24h': -0.001904053599131261,
 'price_change_percentage_24h': -0.19021,
 'market_cap_change_24h': 262822552,
 'market_cap_change_percentage_24h': 0.99164,
 'circulating_supply': 26877872464.183,
 'total_supply': 25470785983.8999,
 'max_supply': None,
 'ath': 1.17,
 'ath_change_percentage': -14.65554,
 'ath_date': '2019-05-08T00:40:28.300Z',
 'atl': 0.877647,
 'atl_change_percentage': 14.03675,
 'atl_date': '2023-03-11T08:02:13.981Z',
 'roi': None,
 'last_updated': '2024-01-31T20:17:16.440Z'},
{'id': 'staked-ether',
 'symbol': 'steth',
 'name': 'Lido Staked Ether',
 'image': 'https://assets.coingecko.com/coins/images/13442/large/steth_logo.png
?1696513206',
 'current_price': 2300.3,
 'market_cap': 21615952642,
 'market_cap_rank': 8,
 'fully_diluted_valuation': 21615983099,
 'total_volume': 15537795,
 'high_24h': 2388.25,
 'low_24h': 2282.2,
 'price_change_24h': -79.4065247267713,
 'price_change_percentage_24h': -3.33683,
 'market_cap_change_24h': -771314688.6999855,
 'market_cap_change_percentage_24h': -3.44533,
 'circulating_supply': 9413448.85718321,

```



```

'total_supply': 9413462.12072922,
'max_supply': 9413448.85718321,
'ath': 4829.57,
'ath_change_percentage': -52.00204,
'ath_date': '2021-11-10T14:40:47.256Z',
'atl': 482.9,
'atl_change_percentage': 380.04005,
'atl_date': '2020-12-22T04:08:21.854Z',
'roi': None,
'last_updated': '2024-01-31T20:17:03.555Z'},
{'id': 'cardano',
'symbol': 'ada',
'name': 'Cardano',
'image':
'https://assets.coingecko.com/coins/images/975/large/cardano.png?1696502090',
'current_price': 0.507282,
'market_cap': 17758193556,
'market_cap_rank': 9,
'fully_diluted_valuation': 22766708338,
'total_volume': 487152935,
'high_24h': 0.527035,
'low_24h': 0.497703,
'price_change_24h': -0.012504995040216405,
'price_change_percentage_24h': -2.40579,
'market_cap_change_24h': -501923537.3990059,
'market_cap_change_percentage_24h': -2.74874,
'circulating_supply': 35100318330.6778,
'total_supply': 45000000000.0,
'max_supply': 45000000000.0,
'ath': 3.09,
'ath_change_percentage': -83.40436,
'ath_date': '2021-09-02T06:00:10.474Z',
'atl': 0.01925275,
'atl_change_percentage': 2560.88116,
'atl_date': '2020-03-13T02:22:55.044Z',
'roi': None,
'last_updated': '2024-01-31T20:17:14.165Z'},
{'id': 'avalanche-2',
'symbol': 'avax',
'name': 'Avalanche',
'image': 'https://assets.coingecko.com/coins/images/12559/large/Avalanche_Circle_RedWhite_Trans.png?1696512369',
'current_price': 34.79,
'market_cap': 12746055973,
'market_cap_rank': 10,
'fully_diluted_valuation': 15108313103,
'total_volume': 520177323,

```

```

'high_24h': 36.28,
'low_24h': 34.08,
'price_change_24h': -1.4558820470585871,
'price_change_percentage_24h': -4.0165,
'market_cap_change_24h': -549272885.7637234,
'market_cap_change_percentage_24h': -4.13132,
'circulating_supply': 367084026.783708,
'total_supply': 435116909.331076,
'max_supply': 720000000.0,
'ath': 144.96,
'ath_change_percentage': -75.75443,
'ath_date': '2021-11-21T14:18:56.538Z',
'atl': 2.8,
'atl_change_percentage': 1154.76122,
'atl_date': '2020-12-31T13:15:21.540Z',
'roi': None,
'last_updated': '2024-01-31T20:17:23.249Z'}]]

```

1. What is the latest price of BTC?

```

[125]: # Write your answer here
cc_data[0]['current_price']

```

[125]: 42886

2. What date is the date of data retrieval?

```

[126]: # Write your answer here
cc_data[0]['last_updated']

```

[126]: '2024-01-31T20:17:14.678Z'

3. How do we know if our code can properly access the website or not? (require a bit of function reference searching on Internet)

```

[127]: # Write your answer here
resp.status_code

```

[127]: 200

[]: