

One-Hot-Encoding:

Encoding

Converting categorical data into numerical data

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
from sklearn.preprocessing import OneHotEncoder

df=pd.read_csv(r"C:\Users\DELL\Downloads\Salary_EDA.csv")
df.head()
```

	Age	Gender	Education Level	Job Title	Years of Experience
0	32.0	Male	Bachelor's	Software Engineer	5.0
1	28.0	Female	Master's	Data Analyst	3.0
2	45.0	Male	PhD	Senior Manager	15.0
3	36.0	Female	Bachelor's	Sales Associate	7.0
4	36.0	Female	Bachelor's	Sales Associate	7.0

	Salary
0	90000.0
1	65000.0
2	150000.0
3	60000.0
4	60000.0

Filter Categorical feature

```
categorical_cols=['Education Level']
```

Define and apply Encoder

```
encoder=OneHotEncoder(drop=None,sparse_output=False)
encoder_data=encoder.fit_transform(df[categorical_cols])
print(encoder_data)
```

```
[[1. 0. 0. 0.]
 [0. 1. 0. 0.]
 [0. 0. 1. 0.]
 ...
 [1. 0. 0. 0.]
 [1. 0. 0. 0.]
 [0. 0. 1. 0.]]
```

```
encoded_df=pd.DataFrame(encoder_data,
columns=encoder.get_feature_names_out(categorical_cols))
encoded_df.head()
```

	Education Level_Bachelor's	Education Level_Master's	Education Level_PhD
0	1.0	0.0	0.0
1	0.0	1.0	0.0
2	0.0	0.0	1.0
3	1.0	0.0	0.0
4	1.0	0.0	0.0

	Education Level_nan
0	0.0
1	0.0
2	0.0
3	0.0
4	0.0

```
encoded_df.drop(columns=['Education Level_nan'],inplace=True)
encoded_df.head()
```

	Education Level_Bachelor's	Education Level_Master's	Education Level_PhD
0	1.0	0.0	0.0
1	0.0	1.0	0.0
2	0.0	0.0	1.0
3	1.0	0.0	0.0
4	1.0	0.0	0.0

```
final_df=pd.concat([df,encoded_df],axis=1)
final_df.head()
```

	Age	Gender	Education Level	Job Title	Years of Experience \
0	32.0	Male	Bachelor's	Software Engineer	5.0
1	28.0	Female	Master's	Data Analyst	3.0
2	45.0	Male	PhD	Senior Manager	15.0
3	36.0	Female	Bachelor's	Sales Associate	7.0
4	36.0	Female	Bachelor's	Sales Associate	7.0

	Salary	Education Level_Bachelor's	Education Level_Master's \
0	90000.0	1.0	0.0
1	65000.0	0.0	1.0
2	150000.0	0.0	0.0
3	60000.0	1.0	0.0
4	60000.0	1.0	0.0

	Education Level_PhD
0	0.0
1	0.0
2	1.0
3	0.0
4	0.0

Label Encoder

```
from sklearn.preprocessing import LabelEncoder

df1=pd.read_csv(r"C:\Users\DELL\Downloads\Salary_EDA.csv")
df1.head()
```

	Age	Gender	Education Level	Job Title	Years of Experience \
0	32.0	Male	Bachelor's	Software Engineer	5.0
1	28.0	Female	Master's	Data Analyst	3.0
2	45.0	Male	PhD	Senior Manager	15.0
3	36.0	Female	Bachelor's	Sales Associate	7.0
4	36.0	Female	Bachelor's	Sales Associate	7.0

	Salary
0	90000.0
1	65000.0

```
2 150000.0
3  60000.0
4  60000.0
```

```
le=LabelEncoder()
df1['Gender_e']=le.fit_transform(df['Gender'])
df1.head()
```

	Age	Gender	Education Level	Job Title	Years of Experience \
0	32.0	Male	Bachelor's	Software Engineer	5.0
1	28.0	Female	Master's	Data Analyst	3.0
2	45.0	Male	PhD	Senior Manager	15.0
3	36.0	Female	Bachelor's	Sales Associate	7.0
4	36.0	Female	Bachelor's	Sales Associate	7.0

	Salary	Gender_e
0	90000.0	1
1	65000.0	0
2	150000.0	1
3	60000.0	0
4	60000.0	0

```
le1=LabelEncoder()
df1['Education_e']=le1.fit_transform(df['Education Level'])
df1.head()
```

	Age	Gender	Education Level	Job Title	Years of Experience \
0	32.0	Male	Bachelor's	Software Engineer	5.0
1	28.0	Female	Master's	Data Analyst	3.0
2	45.0	Male	PhD	Senior Manager	15.0
3	36.0	Female	Bachelor's	Sales Associate	7.0
4	36.0	Female	Bachelor's	Sales Associate	7.0

	Salary	Gender_e	Education_e
0	90000.0	1	0
1	65000.0	0	1
2	150000.0	1	2

3	60000.0	0	0
4	60000.0	0	0

Standardization

Min-Max Scaling

```
from sklearn.preprocessing import MinMaxScaler
```

```
df2=pd.read_csv(r"C:\Users\DELL\Downloads\Salary_EDA.csv")
df2.head()
```

	Age	Gender	Education Level	Job Title	Years of Experience \
0	32.0	Male	Bachelor's	Software Engineer	5.0
1	28.0	Female	Master's	Data Analyst	3.0
2	45.0	Male	PhD	Senior Manager	15.0
3	36.0	Female	Bachelor's	Sales Associate	7.0
4	36.0	Female	Bachelor's	Sales Associate	7.0

	Salary
0	90000.0
1	65000.0
2	150000.0
3	60000.0
4	60000.0

```
le2=MinMaxScaler()
df2['Min_MAx_s']=le2.fit_transform(df2[['Salary']])
df2.head()
```

	Age	Gender	Education Level	Job Title	Years of Experience \
0	32.0	Male	Bachelor's	Software Engineer	5.0
1	28.0	Female	Master's	Data Analyst	3.0
2	45.0	Male	PhD	Senior Manager	15.0
3	36.0	Female	Bachelor's	Sales Associate	7.0
4	36.0	Female	Bachelor's	Sales Associate	7.0

	Salary	Min_MAx_s
--	--------	-----------

```

0    90000.0    0.359103
1    65000.0    0.258963
2   150000.0    0.599439
3    60000.0    0.238935
4    60000.0    0.238935

```

Z-Score Normalization

```

from sklearn.preprocessing import StandardScaler

df3=pd.read_csv(r"C:\Users\DELL\Downloads\Salary_EDA.csv")
df3.head()

```

	Age	Gender	Education Level	Job Title	Years of Experience \
0	32.0	Male	Bachelor's	Software Engineer	5.0
1	28.0	Female	Master's	Data Analyst	3.0
2	45.0	Male	PhD	Senior Manager	15.0
3	36.0	Female	Bachelor's	Sales Associate	7.0
4	36.0	Female	Bachelor's	Sales Associate	7.0

```

Salary
0    90000.0
1    65000.0
2   150000.0
3    60000.0
4    60000.0

n=StandardScaler()
df3[['Salary_s']]=n.fit_transform(df3[['Salary']])
df3.head()

```

	Age	Gender	Education Level	Job Title	Years of Experience \
0	32.0	Male	Bachelor's	Software Engineer	5.0
1	28.0	Female	Master's	Data Analyst	3.0
2	45.0	Male	PhD	Senior Manager	15.0
3	36.0	Female	Bachelor's	Sales Associate	7.0
4	36.0	Female	Bachelor's	Sales Associate	7.0

	Salary	Salary_s
0	90000.0	-0.211488
1	65000.0	-0.733148
2	150000.0	1.040496
3	60000.0	-0.837480
4	60000.0	-0.837480

Randomfox

Weather API

```
import requests

page = requests.get('http://api.weatherapi.com/v1/current.json?
key=e0e8dd5d0a4547c8b1290403252003&q=Tumkur')

print(page)

<Response [200]>

result=page.json()
print(result)

{'location': {'name': 'Tumkur', 'region': 'Karnataka', 'country':
'India', 'lat': 13.3422, 'lon': 77.1017, 'tz_id': 'Asia/Kolkata',
'localtime_epoch': 1742462009, 'localtime': '2025-03-20 14:43'},
'current': {'last_updated_epoch': 1742461200, 'last_updated': '2025-
03-20 14:30', 'temp_c': 34.6, 'temp_f': 94.2, 'is_day': 1,
'condition': {'text': 'Sunny', 'icon':
'//cdn.weatherapi.com/weather/64x64/day/113.png', 'code': 1000},
'wind_mph': 9.4, 'wind_kph': 15.1, 'wind_degree': 113, 'wind_dir':
'ESE', 'pressure_mb': 1011.0, 'pressure_in': 29.85, 'precip_mm': 0.0,
'precip_in': 0.0, 'humidity': 18, 'cloud': 4, 'feelslike_c': 32.7,
'feelslike_f': 90.8, 'windchill_c': 34.6, 'windchill_f': 94.2,
'heatindex_c': 32.7, 'heatindex_f': 90.8, 'dewpoint_c': 6.6,
'dewpoint_f': 43.9, 'vis_km': 10.0, 'vis_miles': 6.0, 'uv': 9.2,
'gust_mph': 10.8, 'gust_kph': 17.4}}
```

```
import requests

page1 = requests.get('http://api.coincap.io/v2/assets')

print(page1)

<Response [200]>

result2=page1.json()
print(result2)

{'data': [{'id': 'bitcoin', 'rank': '1', 'symbol': 'BTC', 'name':
'Bitcoin', 'supply': '19839400.000000000000000000', 'maxSupply':
'21000000.000000000000000000', 'marketCapUsd':
```

```
'1690642085530.0853481637253200', 'volumeUsd24Hr':  
'10294944841.8616370400283995', 'priceUsd': '85216.3919034892863778',  
'changePercent24Hr': '1.9836879808947798', 'vwap24Hr':  
'85242.5393622283315806', 'explorer': 'https://blockchain.info/'}},  
{'id': 'ethereum', 'rank': '2', 'symbol': 'ETH', 'name': 'Ethereum',  
'supply': '120629195.4269564900000000', 'maxSupply': None,  
'marketCapUsd': '238734461075.7161446148298806', 'volumeUsd24Hr':  
'6729067228.2899936661334663', 'priceUsd': '1979.0769575369908867',  
'changePercent24Hr': '1.6520305999880752', 'vwap24Hr':  
'2024.2133024845636723', 'explorer': 'https://etherscan.io/'}, {'id':  
'xrp', 'rank': '3', 'symbol': 'XRP', 'name': 'XRP', 'supply':  
'58108919817.0000000000000000', 'maxSupply':  
'100000000000.0000000000000000', 'marketCapUsd':  
'144191872011.1592730779322174', 'volumeUsd24Hr':  
'3357716503.8780937196576763', 'priceUsd': '2.4814068556988622',  
'changePercent24Hr': '7.1605573075624635', 'vwap24Hr':  
'2.4928862050830814', 'explorer':  
'https://xrpxcharts.ripple.com/#/graph/'}, {'id': 'tether', 'rank':  
'4', 'symbol': 'USDT', 'name': 'Tether', 'supply':  
'143653509034.0653000000000000', 'maxSupply': None, 'marketCapUsd':  
'143663642526.7808607656955725', 'volumeUsd24Hr':  
'25449713866.7556984106643171', 'priceUsd': '1.0000705412125586',  
'changePercent24Hr': '0.0983642425420199', 'vwap24Hr':  
'1.0000049550248507', 'explorer':  
'https://www.omniexplorer.info/asset/31'}, {'id': 'binance-coin',  
'rank': '5', 'symbol': 'BNB', 'name': 'BNB', 'supply':  
'144006830.0000000000000000', 'maxSupply':  
'144006830.0000000000000000', 'marketCapUsd':  
'90954338061.3573831468269190', 'volumeUsd24Hr':  
'600713038.6357500759714707', 'priceUsd': '631.5973906331899893',  
'changePercent24Hr': '2.7715900498102202', 'vwap24Hr':  
'618.9696781325982878', 'explorer':  
'https://etherscan.io/token/0xB8c77482e45F1F44dE1745F52C74426C631bDD52  
'}, {'id': 'solana', 'rank': '6', 'symbol': 'SOL', 'name': 'Solana',  
'supply': '510156044.0299182000000000', 'maxSupply': None,  
'marketCapUsd': '66873314113.1331921167700411', 'volumeUsd24Hr':  
'1414948574.7107678301201302', 'priceUsd': '131.0840377090806233',  
'changePercent24Hr': '3.4960381830251608', 'vwap24Hr':  
'131.8975376028978327', 'explorer': 'https://explorer.solana.com/'},  
{'id': 'usd-coin', 'rank': '7', 'symbol': 'USDC', 'name': 'USDC',  
'supply': '59242276090.4832400000000000', 'maxSupply': None,  
'marketCapUsd': '59239061810.2627599880448739', 'volumeUsd24Hr':  
'7308950361.2822159828679514', 'priceUsd': '0.9999457434718482',  
'changePercent24Hr': '0.0118523738178789', 'vwap24Hr':  
'0.9998783674489655', 'explorer':  
'https://etherscan.io/token/0xa0b86991c6218b36c1d19d4a2e9eb0ce3606eb48  
'}, {'id': 'dogecoin', 'rank': '8', 'symbol': 'DOGE', 'name':  
'Dogecoin', 'supply': '148504846383.7052600000000000', 'maxSupply':  
None, 'marketCapUsd': '25476794833.6981315002748224', 'volumeUsd24Hr':
```



```
'431306684.1415249718047652', 'priceUsd': '0.1715553091639276',  
'changePercent24Hr': '2.0294320254526730', 'vwap24Hr':  
'0.1734732543432387', 'explorer':  
'http://dogechain.info/chain/Dogecoin'}, {'id': 'cardano', 'rank':  
'9', 'symbol': 'ADA', 'name': 'Cardano', 'supply':  
'35234797228.4508800000000000', 'maxSupply':  
'45000000000.0000000000000000', 'marketCapUsd':  
'25475750632.5413830738443589', 'volumeUsd24Hr':  
'506665643.3468665003857583', 'priceUsd': '0.7230281606948087',  
'changePercent24Hr': '1.1911722975056992', 'vwap24Hr':  
'0.7325503992467106', 'explorer': 'https://cardanoexplorer.com/'},  
{ 'id': 'tron', 'rank': '10', 'symbol': 'TRX', 'name': 'TRON',  
'supply': '95016082389.9211600000000000', 'maxSupply': None,  
'marketCapUsd': '21770104775.3306929123317061', 'volumeUsd24Hr':  
'300785351.3049877347662649', 'priceUsd': '0.2291202102607417',  
'changePercent24Hr': '-0.6001843190759570', 'vwap24Hr':  
'0.2308132350537269', 'explorer': 'https://tronscan.org/#/'}, { 'id':  
'steth', 'rank': '11', 'symbol': 'STETH', 'name': 'Lido Staked ETH',  
'supply': '9343402.8086646900000000', 'maxSupply': None,  
'marketCapUsd': '18741559857.8576187344390838', 'volumeUsd24Hr':  
'2186170.8886151018061522', 'priceUsd': '2005.8602033594721924',  
'changePercent24Hr': '3.5855410182863604', 'vwap24Hr':  
'2028.5884216778813735', 'explorer':  
'https://etherscan.io/token/0xae7ab96520de3a18e5e111b5eaab095312d7fe84  
'}, { 'id': 'wrapped-bitcoin', 'rank': '12', 'symbol': 'WBTC', 'name':  
'Wrapped Bitcoin', 'supply': '129077.4055218900000000', 'maxSupply':  
None, 'marketCapUsd': '10963884958.3962048475659037', 'volumeUsd24Hr':  
'219605200.6366182241361597', 'priceUsd': '84940.3883976956737447',  
'changePercent24Hr': '1.8813851611653240', 'vwap24Hr':  
'84747.3853825132357810', 'explorer':  
'https://etherscan.io/token/0x2260fac5e5542a773aa44fbcfedf7c193bc2c599  
'}, { 'id': 'chainlink', 'rank': '13', 'symbol': 'LINK', 'name':  
'Chainlink', 'supply': '657099970.4527867000000000', 'maxSupply':  
None, 'marketCapUsd': '9481276082.4173315097478126', 'volumeUsd24Hr':  
'230836239.8577692177869929', 'priceUsd': '14.4289704896563693',  
'changePercent24Hr': '2.5579691399972537', 'vwap24Hr':  
'14.5792051041035412', 'explorer':  
'https://etherscan.io/token/0x514910771af9ca656af840dff83e8264ecf986ca  
'}, { 'id': 'unus-sed-leo', 'rank': '14', 'symbol': 'LEO', 'name':  
'UNUS SED LEO', 'supply': '923901567.9000000000000000', 'maxSupply':  
None, 'marketCapUsd': '9011625589.5838988126150367', 'volumeUsd24Hr':  
'425245.1884322649154217', 'priceUsd': '9.7538806109692487',  
'changePercent24Hr': '-0.2010240314152416', 'vwap24Hr':  
'9.8277506315106542', 'explorer':  
'https://eospark.com/account/bitfinexleo1'}, { 'id': 'tontoken',  
'rank': '15', 'symbol': 'TON', 'name': 'Toncoin', 'supply':  
'2476378413.2700000000000000', 'maxSupply':  
'5047558527.7000000000000000', 'marketCapUsd':  
'8918263108.7051928114921167', 'volumeUsd24Hr':
```

```
'77871866.2306326518824946', 'priceUsd': '3.6013329226726840',  
'changePercent24Hr': '0.9946674541477572', 'vwap24Hr':  
'3.6585606815384103', 'explorer': 'https://tonscan.org/'}}, {'id':  
'stellar', 'rank': '16', 'symbol': 'XLM', 'name': 'Stellar', 'supply':  
'30754554606.4495930000000000', 'maxSupply':  
'50001806812.0000000000000000', 'marketCapUsd':  
'8733322049.6956054695193025', 'volumeUsd24Hr':  
'166330934.6178860568812096', 'priceUsd': '0.2839684125311353',  
'changePercent24Hr': '2.0051822651836799', 'vwap24Hr':  
'0.2884719346732946', 'explorer': 'https://dashboard.stellar.org/'},  
{'id': 'hedera-hashgraph', 'rank': '17', 'symbol': 'HBAR', 'name':  
'Hedera', 'supply': '41903956526.0000000000000000', 'maxSupply':  
'50000000000.0000000000000000', 'marketCapUsd':  
'8003807985.7870810750038754', 'volumeUsd24Hr':  
'110383975.0409056900729802', 'priceUsd': '0.1910036342468279',  
'changePercent24Hr': '0.9009513320328468', 'vwap24Hr':  
'0.1942284329569353', 'explorer':  
'https://app.dragonglass.me/hedera/home'}, {'id': 'avalanche', 'rank':  
'18', 'symbol': 'AVAX', 'name': 'Avalanche', 'supply':  
'414456636.6751344000000000', 'maxSupply':  
'715748719.0000000000000000', 'marketCapUsd':  
'7806457099.3601934855561824', 'volumeUsd24Hr':  
'141503168.6997546312188508', 'priceUsd': '18.8354013630602505',  
'changePercent24Hr': '-1.1354138393423072', 'vwap24Hr':  
'19.5287633021200533', 'explorer': 'https://avascan.info/'}, {'id':  
'sui', 'rank': '19', 'symbol': 'SUI', 'name': 'Sui', 'supply':  
'3169845047.4838877000000000', 'maxSupply':  
'10000000000.0000000000000000', 'marketCapUsd':  
'7721531552.7685696323634554', 'volumeUsd24Hr':  
'504750317.4720946936901109', 'priceUsd': '2.4359334406259548',  
'changePercent24Hr': '4.7405410559144643', 'vwap24Hr':  
'2.4126010977218888', 'explorer': 'https://suiexplorer.com/'}, {'id':  
'shiba-inu', 'rank': '20', 'symbol': 'SHIB', 'name': 'Shiba Inu',  
'supply': '589252943029396.8000000000000000', 'maxSupply':  
'589552695333683.0000000000000000', 'marketCapUsd':  
'7495374127.0758649264170374', 'volumeUsd24Hr':  
'60446872.1299062676153712', 'priceUsd': '0.0000127201301508',  
'changePercent24Hr': '0.8445142824611307', 'vwap24Hr':  
'0.0000128118079473', 'explorer':  
'https://etherscan.io/token/0x95ad61b0a150d79219dcf64e1e6cc01f0b64c4ce  
'}, {'id': 'litecoin', 'rank': '21', 'symbol': 'LTC', 'name':  
'Litecoin', 'supply': '75558468.3040892000000000', 'maxSupply':  
'84000000.0000000000000000', 'marketCapUsd':  
'6898560207.6697803281965522', 'volumeUsd24Hr':  
'221311374.9320820227537524', 'priceUsd': '91.3009535861175268',  
'changePercent24Hr': '1.0853592691530543', 'vwap24Hr':  
'92.4410926615558313', 'explorer':  
'http://explorer.litecoin.net/chain/Litecoin'}, {'id': 'bitcoin-cash',  
'rank': '22', 'symbol': 'BCH', 'name': 'Bitcoin Cash', 'supply':
```

```
'19844653.125000000000000000', 'maxSupply': '21000000.000000000000000000',  
'marketCapUsd': '6798915157.5026026645963059', 'volumeUsd24Hr':  
'59074462.1743305150114254', 'priceUsd': '342.6069034654695011',  
'changePercent24Hr': '2.4318789414867839', 'vwap24Hr':  
'342.5593810157307243', 'explorer': 'https://blockchair.com/bitcoin-  
cash/blocks'}, {'id': 'polkadot', 'rank': '23', 'symbol': 'DOT',  
'name': 'Polkadot', 'supply': '1522267060.000000000000000000',  
'maxSupply': None, 'marketCapUsd': '6724278057.1828343933012220',  
'volumeUsd24Hr': '97957246.7290535330499798', 'priceUsd':  
'4.4172788296311387', 'changePercent24Hr': '-1.3770214577450251',  
'vwap24Hr': '4.5172330606186289', 'explorer':  
'https://polkascan.io/polkadot'}, {'id': 'weth', 'rank': '24',  
'symbol': 'WETH', 'name': 'Wrapped ETH', 'supply':  
'3375317.590000000000000000', 'maxSupply': None, 'marketCapUsd':  
'6682728101.6322830935636371', 'volumeUsd24Hr':  
'666395842.1172410305947730', 'priceUsd': '1979.8812773740449987',  
'changePercent24Hr': '1.8656750508583278', 'vwap24Hr': None,  
'explorer':  
'https://etherscan.io/token/0xc02aaa39b223fe8d0a0e5c4f27ead9083c756cc2  
'}, {'id': 'mantra-dao', 'rank': '25', 'symbol': 'OM', 'name':  
'Mantra', 'supply': '974778351.819999700000000000', 'maxSupply':  
'888888888.000000000000000000', 'marketCapUsd':  
'6655177082.6944204230385661', 'volumeUsd24Hr':  
'86524225.1013115961006538', 'priceUsd': '6.8273747260273071',  
'changePercent24Hr': '-0.1324438008582855', 'vwap24Hr':  
'6.7209664365517782', 'explorer':  
'https://etherscan.io/token/0x3593d125a4f7849a1b059e64f4517a86dd60c95d  
'}, {'id': 'ethena-usde', 'rank': '26', 'symbol': 'USDE', 'name':  
'Ethena USDe', 'supply': '5414093569.960837000000000000', 'maxSupply':  
None, 'marketCapUsd': '5414561803.4052262249717105', 'volumeUsd24Hr':  
'19151150.1652429992058487', 'priceUsd': '1.0000864841802859',  
'changePercent24Hr': '0.0400418975286859', 'vwap24Hr': None,  
'explorer': 'etherscan.io'}, {'id': 'multi-collateral-dai', 'rank':  
'27', 'symbol': 'DAI', 'name': 'Dai', 'supply':  
'5365382702.664872000000000000', 'maxSupply': None, 'marketCapUsd':  
'5363388092.9134112399528005', 'volumeUsd24Hr':  
'137915426.2916914406294868', 'priceUsd': '0.9996282446449775',  
'changePercent24Hr': '-0.0237682706874533', 'vwap24Hr':  
'1.0002698968912074', 'explorer':  
'https://etherscan.io/token/0x89d24a6b4ccb1b6faa2625fe562bdd9a23260359  
'}, {'id': 'hyperliquid', 'rank': '28', 'symbol': 'HYPE', 'name':  
'Hyperliquid', 'supply': '333928180.000000000000000000', 'maxSupply':  
'1000000000.000000000000000000', 'marketCapUsd':  
'4888077317.9923266991949440', 'volumeUsd24Hr':  
'30061501.6312586248683911', 'priceUsd': '14.6381096617611808',  
'changePercent24Hr': '-1.5876034627713707', 'vwap24Hr':  
'15.0361485746902042', 'explorer':  
'https://app.hyperliquid.xyz/explorer/token/0xd01dc56dcaaca66ad901c95  
9b4011ec'}, {'id': 'uniswap', 'rank': '29', 'symbol': 'UNI', 'name':
```

```
'Uniswap', 'supply': '600585117.7100000000000000', 'maxSupply': None,
'marketCapUsd': '4053463112.9343575746860993', 'volumeUsd24Hr':
'171580222.0026354281834810', 'priceUsd': '6.7491900704932597',
'changePercent24Hr': '6.1883898600480947', 'vwap24Hr':
'6.8543656687369988', 'explorer':
'https://etherscan.io/token/0x1f9840a85d5af5bf1d1762f925bdaddc4201f984
'}, {'id': 'monero', 'rank': '30', 'symbol': 'XMR', 'name': 'Monero',
'supply': '18446744.0737095500000000', 'maxSupply': None,
'marketCapUsd': '3862753446.9385608730819369', 'volumeUsd24Hr':
'41722352.9800322146204408', 'priceUsd': '209.4002839473329371',
'changePercent24Hr': '-0.1155838673249430', 'vwap24Hr':
'207.4493104236109122', 'explorer': 'http://moneroblocks.info/'},
{'id': 'aptos', 'rank': '31', 'symbol': 'APT', 'name': 'Aptos',
'supply': '602951960.5266026000000000', 'maxSupply': None,
'marketCapUsd': '3277714832.7134891805713200', 'volumeUsd24Hr':
'42871906.5823962414957964', 'priceUsd': '5.4361127374904264',
'changePercent24Hr': '-0.7542338486927100', 'vwap24Hr':
'5.5562852890623124', 'explorer': 'https://explorer.aptoslabs.com/'},
{'id': 'near-protocol', 'rank': '32', 'symbol': 'NEAR', 'name': 'Near
Protocol', 'supply': '1196157059.0000000000000000', 'maxSupply': None,
'marketCapUsd': '3231312070.2088653262070800', 'volumeUsd24Hr':
'102268528.9759636218256599', 'priceUsd': '2.7014111950401200',
'changePercent24Hr': '2.8410520437435685', 'vwap24Hr':
'2.7370199197084544', 'explorer':
'https://explorer.nearprotocol.com/'}, {'id': 'pepe', 'rank': '33',
'symbol': 'PEPE', 'name': 'Pepe', 'supply':
'420689899653543.5600000000000000', 'maxSupply':
'4206900000000000.0000000000000000', 'marketCapUsd':
'3120284774.8644130889587537', 'volumeUsd24Hr':
'461409118.9946561135115741', 'priceUsd': '0.0000074170660561',
'changePercent24Hr': '2.1463291675977104', 'vwap24Hr':
'0.0000074128903163', 'explorer':
'https://etherscan.io/token/0x6982508145454ce325ddbe47a25d4ec3d2311933
'}, {'id': 'okb', 'rank': '34', 'symbol': 'OKB', 'name': 'OKB',
'supply': '60000000.0000000000000000', 'maxSupply': None,
'marketCapUsd': '3083179758.3424312140000000', 'volumeUsd24Hr':
'294175.6473118604854896', 'priceUsd': '51.3863293057071869',
'changePercent24Hr': '-2.4279650719017697', 'vwap24Hr':
'52.5876542118397781', 'explorer':
'https://etherscan.io/token/0x75231f58b43240c9718dd58b4967c5114342a86c
'}, {'id': 'internet-computer', 'rank': '35', 'symbol': 'ICP', 'name':
'Internet Computer', 'supply': '481770532.7498429000000000',
'maxSupply': None, 'marketCapUsd': '2819048158.0389400082376104',
'volumeUsd24Hr': '26705918.0816783489194086', 'priceUsd':
'5.8514333409899887', 'changePercent24Hr': '0.4670858255833229',
'vwap24Hr': '5.9152721752229509', 'explorer':
'https://www.dfinityexplorer.org/#/'}, {'id': 'ondo-finance', 'rank':
'36', 'symbol': 'ONDO', 'name': 'Ondo', 'supply':
'3159107529.0000000000000000', 'maxSupply': None, 'marketCapUsd':
```

```
'2719317437.8807796391510168', 'volumeUsd24Hr':  
'111468774.1814221755136510', 'priceUsd': '0.8607866028357592',  
'changePercent24Hr': '2.0077296102904022', 'vwap24Hr':  
'0.8651575731494321', 'explorer':  
'https://etherscan.io/token/0xfAbA6f8e4a5E8Ab82F62fe7C39859FA577269BE3  
'}, {'id': 'ethereum-classic', 'rank': '37', 'symbol': 'ETC', 'name':  
'Ethereum Classic', 'supply': '151189635.09649763000000000',  
'maxSupply': '210700000.000000000000000000', 'marketCapUsd':  
'2708683590.5353160163678993', 'volumeUsd24Hr':  
'57618386.0741633501193250', 'priceUsd': '17.9158021567185050',  
'changePercent24Hr': '-0.0095616000298461', 'vwap24Hr':  
'18.3203847406054817', 'explorer': 'http://gastracker.io/'}, {'id':  
'aave', 'rank': '38', 'symbol': 'AAVE', 'name': 'Aave', 'supply':  
'15090171.90088628000000000', 'maxSupply': None, 'marketCapUsd':  
'2625027191.0426426413377384', 'volumeUsd24Hr':  
'146718892.2619529033211314', 'priceUsd': '173.9560826930320684',  
'changePercent24Hr': '1.0737045729239142', 'vwap24Hr':  
'179.6990656565842250', 'explorer':  
'https://etherscan.io/token/0x80fB784B7eD66730e8b1DBd9820aFD29931aab03  
'}, {'id': 'official-trump', 'rank': '39', 'symbol': 'TRUMP', 'name':  
'Trump Official', 'supply': '199999458.418658000000000000', 'maxSupply':  
'999999993.450000000000000000', 'marketCapUsd':  
'2242640867.2512042812711316', 'volumeUsd24Hr':  
'58877643.5223196126117151', 'priceUsd': '11.2132347006495081',  
'changePercent24Hr': '1.5887094298459962', 'vwap24Hr':  
'11.3340349820828935', 'explorer':  
'https://solscan.io/token/6p6xgHyF7AeE6TZkSmFsko444wqoP15icUSqi2jfGiPN  
'}, {'id': 'vechain', 'rank': '40', 'symbol': 'VET', 'name':  
'VeChain', 'supply': '85985041177.000000000000000000', 'maxSupply':  
'86712634466.000000000000000000', 'marketCapUsd':  
'2235013729.6214504059745007', 'volumeUsd24Hr':  
'40138127.9000095048599507', 'priceUsd': '0.0259930529662791',  
'changePercent24Hr': '1.6325106812652825', 'vwap24Hr':  
'0.0264675461423632', 'explorer': 'https://explore.veforge.com/'},  
{ 'id': 'bittensor', 'rank': '41', 'symbol': 'TAO', 'name':  
'Bittensor', 'supply': '8477596.000000000000000000', 'maxSupply':  
'21000000.000000000000000000', 'marketCapUsd':  
'2179239117.0057662638499876', 'volumeUsd24Hr':  
'65359156.2501678503081091', 'priceUsd': '257.0586186232236431',  
'changePercent24Hr': '2.5882756737895835', 'vwap24Hr':  
'257.1169771050124869', 'explorer': 'https://bittensor.com/scan'},  
{ 'id': 'first-digital-usd', 'rank': '42', 'symbol': 'FDUSD', 'name':  
'First Digital USD', 'supply': '2174390084.127888000000000000',  
'maxSupply': None, 'marketCapUsd': '2174823817.8946146077785453',  
'volumeUsd24Hr': '1074853153.8453354473228763', 'priceUsd':  
'1.0001994737604318', 'changePercent24Hr': '0.1147239749775201',  
'vwap24Hr': '0.9990561152018730', 'explorer': None}, { 'id': 'kasper',  
'rank': '43', 'symbol': 'KAS', 'name': 'Kasper', 'supply':  
'25887954645.697422000000000000', 'maxSupply':
```

```
'28704026601.0000000000000000', 'marketCapUsd':  
'2051316875.1548681955890794', 'volumeUsd24Hr':  
'25762658.7553790767338266', 'priceUsd': '0.0792382752221716',  
'changePercent24Hr': '0.3670030352322707', 'vwap24Hr':  
'0.0809816321869611', 'explorer': 'https://explorer.kaspa.org/'}},  
{'id': 'crypto-com-coin', 'rank': '44', 'symbol': 'CRO', 'name':  
'Cronos', 'supply': '25263013692.0000000000000000', 'maxSupply':  
'30263013692.0000000000000000', 'marketCapUsd':  
'2018138655.8933488663038852', 'volumeUsd24Hr':  
'12375244.5145370251570197', 'priceUsd': '0.0798851111153231',  
'changePercent24Hr': '1.2100754354803322', 'vwap24Hr':  
'0.0809421618331580', 'explorer':  
'https://etherscan.io/token/0xa0b73e1ff0b80914ab6fe0444e65848c4c34450b  
'}, {'id': 'gatetoken', 'rank': '45', 'symbol': 'GT', 'name':  
'GateToken', 'supply': '85845250.1181314900000000', 'maxSupply': None,  
'marketCapUsd': '1960806691.3124646397035135', 'volumeUsd24Hr':  
'44329029.8096696904349384', 'priceUsd': '22.8411786163381454',  
'changePercent24Hr': '2.4722159504102470', 'vwap24Hr':  
'22.7244766743509266', 'explorer': None}, {'id': 'filecoin', 'rank':  
'46', 'symbol': 'FIL', 'name': 'Filecoin', 'supply':  
'645033147.0000000000000000', 'maxSupply': None, 'marketCapUsd':  
'1938986089.8059855752305042', 'volumeUsd24Hr':  
'65842521.0418793387556265', 'priceUsd': '3.0060255024475286',  
'changePercent24Hr': '2.6314638914264830', 'vwap24Hr':  
'3.0177802317611018', 'explorer': 'https://protocol.ai'}, {'id':  
'celestia', 'rank': '47', 'symbol': 'TIA', 'name': 'Celestia',  
'supply': '567415978.4891890000000000', 'maxSupply': None,  
'marketCapUsd': '1850436683.9499372025052081', 'volumeUsd24Hr':  
'46924250.8930040969995433', 'priceUsd': '3.2611642147916595',  
'changePercent24Hr': '-0.3325435202520226', 'vwap24Hr':  
'3.3329304052069249', 'explorer': 'https://www.mintscan.io/celestia'}},  
{'id': 'polygon-ecosystem-token', 'rank': '48', 'symbol': 'POL',  
'name': 'POL (prev. MATIC)', 'supply': '8625238091.9908810000000000',  
'maxSupply': None, 'marketCapUsd': '1847817701.3949630081463143',  
'volumeUsd24Hr': '33803042.4364120238548314', 'priceUsd':  
'0.2142338195986482', 'changePercent24Hr': '0.8513027613533617',  
'vwap24Hr': '0.2167430756460109', 'explorer':  
'https://etherscan.io/token/0x455e53CBB86018Ac2B8092FdCd39d8444aFFC3F6  
'}, {'id': 'cosmos', 'rank': '49', 'symbol': 'ATOM', 'name': 'Cosmos',  
'supply': '390934204.0000000000000000', 'maxSupply': None,  
'marketCapUsd': '1813836811.3230257390539684', 'volumeUsd24Hr':  
'49941084.5924638710247084', 'priceUsd': '4.6397495864112871',  
'changePercent24Hr': '1.1677503786081844', 'vwap24Hr':  
'4.6873794425278023', 'explorer': 'https://www.mintscan.io/'}, {'id':  
'arbitrum', 'rank': '50', 'symbol': 'ARB', 'name': 'Arbitrum',  
'supply': '4617913336.0000000000000000', 'maxSupply': None,  
'marketCapUsd': '1710204601.5372388295418576', 'volumeUsd24Hr':  
'79679239.1439421456325754', 'priceUsd': '0.3703414241676966',  
'changePercent24Hr': '0.4865293623378023', 'vwap24Hr':
```

```
'0.3788973093696755', 'explorer':  
'https://arbiscan.io/token/0x912CE59144191C1204E64559FE8253a0e49E6548'  
{, {'id': 'render', 'rank': '51', 'symbol': 'RENDER', 'name':  
'Render', 'supply': '517716590.0562826400000000', 'maxSupply':  
'644168762.0000000000000000', 'marketCapUsd':  
'1699673755.5933202415200275', 'volumeUsd24Hr':  
'48289482.2504347616045124', 'priceUsd': '3.2830196834305488',  
'changePercent24Hr': '1.0963810877373245', 'vwap24Hr':  
'3.3491042270666040', 'explorer': None}, {'id': 'algorand', 'rank':  
'52', 'symbol': 'ALGO', 'name': 'Algorand', 'supply':  
'8514781260.1196030000000000', 'maxSupply':  
'10000000000.0000000000000000', 'marketCapUsd':  
'1664740683.4830570909921573', 'volumeUsd24Hr':  
'56612065.6301405062702908', 'priceUsd': '0.1955118555164943',  
'changePercent24Hr': '3.7361305875048010', 'vwap24Hr':  
'0.1969868302618405', 'explorer': 'https://algoexplorer.io/'}, {'id':  
'dexe', 'rank': '53', 'symbol': 'DEXE', 'name': 'DeXe', 'supply':  
'83733347.4979964300000000', 'maxSupply': None, 'marketCapUsd':  
'1609927707.8277800567873299', 'volumeUsd24Hr':  
'7926908.0397004738528661', 'priceUsd': '19.2268403919513952',  
'changePercent24Hr': '2.5927551789055223', 'vwap24Hr':  
'18.9555606687238175', 'explorer':  
'https://etherscan.io/token/0xde4EE8057785A7e8e800Db58F9784845A5C2Cbd6'  
'}, {'id': 'fantom', 'rank': '54', 'symbol': 'S', 'name': 'Sonic  
(prev. FTM)', 'supply': '2803634835.5265927000000000', 'maxSupply':  
'3175000000.0000000000000000', 'marketCapUsd':  
'1470410764.2312583845287120', 'volumeUsd24Hr':  
'121313157.5962039618623450', 'priceUsd': '0.5244658632425212',  
'changePercent24Hr': '3.7652785964719520', 'vwap24Hr':  
'0.5298881094387166', 'explorer': 'sonicscan.org'}, {'id': 'jupiter',  
'rank': '55', 'symbol': 'JUP', 'name': 'Jupiter', 'supply':  
'2690911111.1000000000000000', 'maxSupply':  
'3000000000.0000000000000000', 'marketCapUsd':  
'1417967660.5731997235619387', 'volumeUsd24Hr':  
'29086166.2405372612350265', 'priceUsd': '0.5269470458255152',  
'changePercent24Hr': '2.1115565833053345', 'vwap24Hr':  
'0.5348576221212959', 'explorer':  
'https://solscan.io/token/JUPyiwrYJFskUPiHa7hkeR8VUtAeFoSYbKedZNSdvCN'  
'}, {'id': 'story-protocol', 'rank': '56', 'symbol': 'IP', 'name':  
'Story', 'supply': '250000000.0000000000000000', 'maxSupply': None,  
'marketCapUsd': '1378881351.1716494000000000', 'volumeUsd24Hr':  
'22642328.0471039457919210', 'priceUsd': '5.5155254046865976',  
'changePercent24Hr': '3.0842450474863488', 'vwap24Hr':  
'5.4726109767028764', 'explorer': 'www.storyscan.xyz'}, {'id':  
'kucoin-token', 'rank': '57', 'symbol': 'KCS', 'name': 'KuCoin Token',  
'supply': '122561753.8513356400000000', 'maxSupply':  
'200000000.0000000000000000', 'marketCapUsd':  
'1372357953.5403640740288549', 'volumeUsd24Hr':  
'919946.3991273814538985', 'priceUsd': '11.1972773758198675',
```

```
'changePercent24Hr': '0.2904830911608758', 'vwap24Hr':  
'11.2709207966801236', 'explorer':  
'https://etherscan.io/token/0xf34960d9d60be18cc1d5afcla6f012a723a28811  
'}, {'id': 'fetch', 'rank': '58', 'symbol': 'FET', 'name': 'Artificial  
Superintelligence Alliance', 'supply': '2520000000.0000000000000000',  
'maxSupply': '2630547141.0000000000000000', 'marketCapUsd':  
'1324094680.7664145920000000', 'volumeUsd24Hr':  
'50472038.4978286885858022', 'priceUsd': '0.5254343971295296',  
'changePercent24Hr': '1.5392229952782958', 'vwap24Hr':  
'0.5404565561314112', 'explorer':  
'https://etherscan.io/token/0x1d287cc25dad7ccaf76a26bc660c5f7c8e2a05bd  
'}, {'id': 'ethena', 'rank': '59', 'symbol': 'ENA', 'name': 'Ethena',  
'supply': '3223437500.0000000000000000', 'maxSupply': None,  
'marketCapUsd': '1229270033.4034532570312500', 'volumeUsd24Hr':  
'101013106.7839249474699726', 'priceUsd': '0.3813537670277315',  
'changePercent24Hr': '3.5345371426306016', 'vwap24Hr':  
'0.3886082378139560', 'explorer': None}, {'id': 'xinf-in-network',  
'rank': '60', 'symbol': 'XDC', 'name': 'XDC Network', 'supply':  
'15692654414.5500000000000000', 'maxSupply': None, 'marketCapUsd':  
'1106862797.1561695852171292', 'volumeUsd24Hr':  
'25979277.9319150287626391', 'priceUsd': '0.0705338158807539',  
'changePercent24Hr': '5.9995809962723671', 'vwap24Hr':  
'0.0699115336506803', 'explorer':  
'https://etherscan.io/token/0x41ab1b6fcb2fa9dced81acbdec13ea6315f2bf2  
'}, {'id': 'movement', 'rank': '61', 'symbol': 'MOVE', 'name':  
'Movement', 'supply': '2450000000.0000000000000000', 'maxSupply':  
'10000000000.0000000000000000', 'marketCapUsd':  
'1087681773.0950182200000000', 'volumeUsd24Hr':  
'38606924.2910824691061187', 'priceUsd': '0.4439517441204156',  
'changePercent24Hr': '-0.6815374636334299', 'vwap24Hr':  
'0.4509320798633797', 'explorer': None}, {'id': 'maker', 'rank': '62',  
'symbol': 'MKR', 'name': 'Maker', 'supply': '848074.4183746700000000',  
'maxSupply': '1000000.0000000000000000', 'marketCapUsd':  
'1064957711.3990806580381194', 'volumeUsd24Hr':  
'34617021.0711089775830921', 'priceUsd': '1255.7361574943697829',  
'changePercent24Hr': '-2.0540309349983028', 'vwap24Hr':  
'1296.3341378467575909', 'explorer':  
'https://etherscan.io/token/Maker'}, {'id': 'worldcoin-org', 'rank':  
'63', 'symbol': 'WLD', 'name': 'Worldcoin', 'supply':  
'1175774097.0720835000000000', 'maxSupply': None, 'marketCapUsd':  
'1037599089.9298100356286903', 'volumeUsd24Hr':  
'61580467.1431491339217672', 'priceUsd': '0.8824816710230670',  
'changePercent24Hr': '3.6739662839265033', 'vwap24Hr':  
'0.8868551394129586', 'explorer': None}, {'id': 'immutable-x', 'rank':  
'64', 'symbol': 'IMX', 'name': 'Immutable X', 'supply':  
'1768317543.3900000000000000', 'maxSupply':  
'2000000000.0000000000000000', 'marketCapUsd':  
'1011174714.5613373172153217', 'volumeUsd24Hr':  
'11676946.4549090413781845', 'priceUsd': '0.5718286957798530',
```



```
'changePercent24Hr': '-0.2874691472762228', 'vwap24Hr':  
'0.5838655986743531', 'explorer': None}, {'id': 'stacks', 'rank':  
'65', 'symbol': 'STX', 'name': 'Stacks', 'supply':  
'1517742202.535860000000000000', 'maxSupply':  
'1818000000.000000000000000000', 'marketCapUsd':  
'969809994.0133920382687571', 'volumeUsd24Hr':  
'16166619.4074347318692992', 'priceUsd': '0.6389820302769621',  
'changePercent24Hr': '2.6261952941236794', 'vwap24Hr':  
'0.6487824789862280', 'explorer': 'https://explorer.stacks.co/'},  
{ 'id': 'injective-protocol', 'rank': '66', 'symbol': 'INJ', 'name':  
'Injective', 'supply': '98970935.410000000000000000', 'maxSupply':  
'100000000.000000000000000000', 'marketCapUsd':  
'969154869.2078326409242860', 'volumeUsd24Hr':  
'70634999.6271225022991471', 'priceUsd': '9.7923179688358231',  
'changePercent24Hr': '1.6198163891252576', 'vwap24Hr':  
'10.0578219076366968', 'explorer':  
'https://etherscan.io/token/0xe28b3b32b6c345a34ff64674606124dd5aceca30  
'}, {'id': 'sei', 'rank': '67', 'symbol': 'SEI', 'name': 'Sei',  
'supply': '4882361111.000000000000000000', 'maxSupply': None,  
'marketCapUsd': '963500300.0175405406836929', 'volumeUsd24Hr':  
'48580972.8567581086751093', 'priceUsd': '0.1973431047217639',  
'changePercent24Hr': '-0.4777084107360182', 'vwap24Hr':  
'0.2016078149748604', 'explorer': None}, {'id': 'quant', 'rank': '68',  
'symbol': 'QNT', 'name': 'Quant', 'supply':  
'12072738.000000000000000000', 'maxSupply': '14881364.000000000000000000',  
'marketCapUsd': '940614322.4697592789351002', 'volumeUsd24Hr':  
'9809389.9252386940629484', 'priceUsd': '77.9122616981963229',  
'changePercent24Hr': '-0.5526021220378731', 'vwap24Hr':  
'79.1335286640508003', 'explorer':  
'https://etherscan.io/token/0x4a220e6096b25eadb88358cb44068a3248254675  
'}, {'id': 'theta', 'rank': '69', 'symbol': 'THETA', 'name': 'Theta  
Network', 'supply': '1000000000.000000000000000000', 'maxSupply':  
'1000000000.000000000000000000', 'marketCapUsd':  
'931846558.334899500000000000', 'volumeUsd24Hr':  
'23479337.1198430085928467', 'priceUsd': '0.9318465583348995',  
'changePercent24Hr': '2.7331212882246196', 'vwap24Hr':  
'0.9457250927255735', 'explorer': 'https://explorer.thetatoken.org/'},  
{ 'id': 'the-graph', 'rank': '70', 'symbol': 'GRT', 'name': 'The  
Graph', 'supply': '9548531509.165474000000000000', 'maxSupply': None,  
'marketCapUsd': '916790466.1381573846663574', 'volumeUsd24Hr':  
'16034104.5387304790479746', 'priceUsd': '0.0960137655992595',  
'changePercent24Hr': '1.2596241063106023', 'vwap24Hr':  
'0.0981862577295125', 'explorer':  
'https://etherscan.io/token/0xc944e90c64b2c07662a292be6244bdf05cda44a7  
'}, {'id': 'flare', 'rank': '71', 'symbol': 'FLR', 'name': 'Flare',  
'supply': '60983663777.010000000000000000', 'maxSupply': None,  
'marketCapUsd': '913337389.7069371342313978', 'volumeUsd24Hr':  
'3196455.4602250062338827', 'priceUsd': '0.0149767549723907',  
'changePercent24Hr': '1.0092404107809471', 'vwap24Hr':  
'0.0151782329085295', 'explorer': 'https://flare-
```

```
explorer.flare.network/'}, {'id': 'eos', 'rank': '72', 'symbol':  
'EOS', 'name': 'EOS', 'supply': '1553582507.9011000000000000',  
'maxSupply': '2100000000.0000000000000000', 'marketCapUsd':  
'901743297.4293940507767850', 'volumeUsd24Hr':  
'105944693.1190506299018750', 'priceUsd': '0.5804283279731664',  
'changePercent24Hr': '1.3242486777261667', 'vwap24Hr':  
'0.5767013907850762', 'explorer': 'https://bloks.io/'}, {'id': 'lido-  
dao', 'rank': '73', 'symbol': 'LDO', 'name': 'Lido DAO', 'supply':  
'897877243.8587132000000000', 'maxSupply': None, 'marketCapUsd':  
'891063880.0391642144156842', 'volumeUsd24Hr':  
'51798684.2712731889871320', 'priceUsd': '0.9924116978505125',  
'changePercent24Hr': '3.6767728200707531', 'vwap24Hr':  
'1.0260671282064327', 'explorer':  
'https://etherscan.io/token/0x5a98fcbea516cf06857215779fd812ca3bef1b32  
'}, {'id': 'bonk1', 'rank': '74', 'symbol': 'BONK', 'name': 'Bonk',  
'supply': '77795920373892.7800000000000000', 'maxSupply': None,  
'marketCapUsd': '889962893.8774976020184719', 'volumeUsd24Hr':  
'106236575.5927084918874072', 'priceUsd': '0.0000114397116147',  
'changePercent24Hr': '6.2187824488649037', 'vwap24Hr':  
'0.0000114591596308', 'explorer': None}, {'id': 'paypal-usd', 'rank':  
'75', 'symbol': 'PYUSD', 'name': 'PayPal USD', 'supply':  
'791273913.3705820000000000', 'maxSupply': None, 'marketCapUsd':  
'790569288.2289657470754025', 'volumeUsd24Hr':  
'12398706.3043324890868309', 'priceUsd': '0.9991095054067753',  
'changePercent24Hr': '-0.0228729438079024', 'vwap24Hr':  
'0.9990952614340292', 'explorer':  
'https://etherscan.io/token/0x6c3ea9036406852006290770bedfcaba0e23a0e8  
'}, {'id': 'gala', 'rank': '76', 'symbol': 'GALA', 'name': 'Gala',  
'supply': '43599694188.6795700000000000', 'maxSupply':  
'5000000000.0000000000000000', 'marketCapUsd':  
'751316746.2235379380457217', 'volumeUsd24Hr':  
'34484618.7876094179028124', 'priceUsd': '0.0172321563305509',  
'changePercent24Hr': '1.0163465818852607', 'vwap24Hr':  
'0.0175207763826315', 'explorer':  
'https://ethplorer.io/es/address/0x15d4c048f83bd7e37d49ea4c83a07267ec4  
203da#chart=candlestick'}, {'id': 'tether-gold', 'rank': '77',  
'symbol': 'XAUT', 'name': 'Tether Gold', 'supply':  
'246524.0000000000000000', 'maxSupply': None, 'marketCapUsd':  
'747355104.9989932260025528', 'volumeUsd24Hr':  
'18586932.1867785834217718', 'priceUsd': '3031.5713885828285522',  
'changePercent24Hr': '-0.1786119065042680', 'vwap24Hr':  
'3044.8466541425855565', 'explorer':  
'https://etherscan.io/token/0x4922a015c4407f87432b179bb209e125432e4a2a  
'}, {'id': 'tezos', 'rank': '78', 'symbol': 'XTZ', 'name': 'Tezos',  
'supply': '1035418674.2712490000000000', 'maxSupply': None,  
'marketCapUsd': '740866588.0522832285709049', 'volumeUsd24Hr':  
'6841036.7985213704467365', 'priceUsd': '0.7155236876268644',  
'changePercent24Hr': '0.8929318287551325', 'vwap24Hr':  
'0.7229956395603384', 'explorer': 'https://tzkt.io/'}, {'id':
```

```
'pancakeswap', 'rank': '79', 'symbol': 'CAKE', 'name': 'PancakeSwap',  
'supply': '292597679.614945200000000000', 'maxSupply':  
'450000000.000000000000000000', 'marketCapUsd':  
'713306286.1340875931173734', 'volumeUsd24Hr':  
'191130813.1805192377724891', 'priceUsd': '2.4378398594028139',  
'changePercent24Hr': '4.4297426472975717', 'vwap24Hr':  
'2.4075132622140791', 'explorer':  
'https://bscscan.com/token/0x0e09fabb73bd3ade0a17ecc321fd13a19e81ce82'  
'}, {'id': 'nexo', 'rank': '80', 'symbol': 'NEX0', 'name': 'Nexo',  
'supply': '646145839.574684700000000000', 'maxSupply': None,  
'marketCapUsd': '712863729.0932514143239706', 'volumeUsd24Hr':  
'5585649.8444599931404323', 'priceUsd': '1.1032551560843953',  
'changePercent24Hr': '2.3465468296769358', 'vwap24Hr':  
'1.1143181959095670', 'explorer':  
'https://etherscan.io/token/0xb62132e35a6c13eelee0f84dc5d40bad8d815206'  
'}, {'id': 'the-sandbox', 'rank': '81', 'symbol': 'SAND', 'name': 'The  
Sandbox', 'supply': '2469357126.223322400000000000', 'maxSupply': None,  
'marketCapUsd': '711030033.2703174161037451', 'volumeUsd24Hr':  
'26787770.9740126697746162', 'priceUsd': '0.2879413535286324',  
'changePercent24Hr': '0.7328180422539244', 'vwap24Hr':  
'0.2931910864710207', 'explorer':  
'https://etherscan.io/token/0x3845badAde8e6dFF049820680d1F14bD3903a5d0'  
'}, {'id': 'jasmy', 'rank': '82', 'symbol': 'JASMY', 'name':  
'JasmyCoin', 'supply': '49444999677.169580000000000000', 'maxSupply':  
'50000000000.000000000000000000', 'marketCapUsd':  
'693033850.9047319006259671', 'volumeUsd24Hr':  
'45455328.4660881669105057', 'priceUsd': '0.0140162575675924',  
'changePercent24Hr': '1.4966805982498385', 'vwap24Hr':  
'0.0142540713967015', 'explorer': None}, {'id': 'bittorrent', 'rank':  
'83', 'symbol': 'BTTOLD', 'name': 'BitTorrent [New]', 'supply':  
'986061142857000.000000000000000000', 'maxSupply': None, 'marketCapUsd':  
'690843267.8492096272920000', 'volumeUsd24Hr':  
'7508604.6205496232434296', 'priceUsd': '0.0000007006089560',  
'changePercent24Hr': '0.3336519410261630', 'vwap24Hr':  
'0.0000007077457700', 'explorer':  
'https://tronscan.org/#/token/1002000'}, {'id': 'bitcoin-sv', 'rank':  
'84', 'symbol': 'BSV', 'name': 'Bitcoin SV', 'supply':  
'19840112.500000000000000000', 'maxSupply': None, 'marketCapUsd':  
'681426659.5666667507402338', 'volumeUsd24Hr':  
'18670136.5496791369080833', 'priceUsd': '34.3459070389175843',  
'changePercent24Hr': '0.1181753066599000', 'vwap24Hr':  
'34.9265296142814359', 'explorer': 'https://bsvexplorer.io/'}, {'id':  
'iota', 'rank': '85', 'symbol': 'IOTA', 'name': 'IOTA', 'supply':  
'3688810566.000000000000000000', 'maxSupply': None, 'marketCapUsd':  
'678751798.9662839568253296', 'volumeUsd24Hr':  
'14217329.2091482157692475', 'priceUsd': '0.1840028884167656',  
'changePercent24Hr': '0.2625801379990903', 'vwap24Hr':  
'0.1891774201881309', 'explorer': 'https://thetangle.org/'}, {'id':  
'flow', 'rank': '86', 'symbol': 'FLOW', 'name': 'Flow', 'supply':
```

```
'1571065878.3134005000000000', 'maxSupply': None, 'marketCapUsd':  
'669607113.5185818469934455', 'volumeUsd24Hr':  
'8511399.9220103565486239', 'priceUsd': '0.4262119894281141',  
'changePercent24Hr': '0.0687354453204261', 'vwap24Hr':  
'0.4342130671098193', 'explorer': 'https://flowscan.org/', {'id':  
'berachain', 'rank': '87', 'symbol': 'BERA', 'name': 'Berachain',  
'supply': '107480000.0000000000000000', 'maxSupply': None,  
'marketCapUsd': '656292794.5223479984760000', 'volumeUsd24Hr':  
'56317316.6065093487381034', 'priceUsd': '6.1061852858424637',  
'changePercent24Hr': '1.2895540914671126', 'vwap24Hr':  
'6.1129705559539544', 'explorer': None}, {'id': 'jito', 'rank': '88',  
'symbol': 'JT0', 'name': 'Jito', 'supply':  
'306702602.6000000000000000', 'maxSupply': None, 'marketCapUsd':  
'654047836.2810334028406802', 'volumeUsd24Hr':  
'20564306.3921373418557394', 'priceUsd': '2.1325147903424847',  
'changePercent24Hr': '0.0929437212645200', 'vwap24Hr':  
'2.1761676500364502', 'explorer':  
'https://solscan.io/token/jtojtomepa8beP8AuQc6eXt5FriJwfFMwQx2v2f9mCL'  
}, {'id': 'kaia', 'rank': '89', 'symbol': 'KAIA', 'name': 'Kaia',  
'supply': '5966455361.8200000000000000', 'maxSupply': None,  
'marketCapUsd': '649366797.9384401548538702', 'volumeUsd24Hr':  
'8754565.9784934354505705', 'priceUsd': '0.1088362785874188',  
'changePercent24Hr': '0.8378713366187482', 'vwap24Hr':  
'0.1104747695452795', 'explorer': 'https://www.kaiascan.io/', {'id':  
'pax-gold', 'rank': '90', 'symbol': 'PAXG', 'name': 'PAX Gold',  
'supply': '210371.2200000000000000', 'maxSupply': None,  
'marketCapUsd': '641814002.6728522114823125', 'volumeUsd24Hr':  
'11824760.9223539436877008', 'priceUsd': '3050.8640995324940906',  
'changePercent24Hr': '-0.6078995005208248', 'vwap24Hr':  
'3063.7385821688497292', 'explorer':  
'https://etherscan.io/token/0x45804880de22913dafa09f4980848ece6ecbaf78'  
}, {'id': 'ethereum-name-service', 'rank': '91', 'symbol': 'ENS',  
'name': 'Ethereum Name Service', 'supply':  
'35599404.0400000000000000', 'maxSupply':  
'100000000.0000000000000000', 'marketCapUsd':  
'616456810.3928497055155724', 'volumeUsd24Hr':  
'103982566.3595455772005518', 'priceUsd': '17.3164924249908793',  
'changePercent24Hr': '5.4738221200742122', 'vwap24Hr':  
'17.6653793028411382', 'explorer':  
'https://etherscan.io/token/0xC18360217D8F7Ab5e7c516566761Ea12Ce7F9D72'  
}, {'id': 'floki-inu', 'rank': '92', 'symbol': 'FLOKI', 'name':  
'FLOKI', 'supply': '9626637864609.9200000000000000', 'maxSupply':  
'0.0000000000000000', 'marketCapUsd': '599862691.9446230955278230',  
'volumeUsd24Hr': '53987764.4359382876316853', 'priceUsd':  
'0.0000623127929378', 'changePercent24Hr': '2.8879433595097581',  
'vwap24Hr': '0.0000627175580075', 'explorer':  
'https://bscscan.com/token/0xfb5b838b6cfeedc2873ab27866079ac55363d37e'  
}, {'id': 'telcoin', 'rank': '93', 'symbol': 'TEL', 'name': 'Telcoin',  
'supply': '93880083810.9700000000000000', 'maxSupply':
```

```
'100000000000.000000000000000000', 'marketCapUsd':  
'589882316.2723307332699816', 'volumeUsd24Hr':  
'3126921.8749368386252081', 'priceUsd': '0.0062833594978470',  
'changePercent24Hr': '16.8472670998418620', 'vwap24Hr':  
'0.0059728674563361', 'explorer':  
'https://etherscan.io/token/0x85e076361cc813a908ff672f9bad1541474402b2  
'}, {'id': 'neo', 'rank': '94', 'symbol': 'NEO', 'name': 'Neo',  
'supply': '70538831.000000000000000000', 'maxSupply': None,  
'marketCapUsd': '586987921.7603360509512754', 'volumeUsd24Hr':  
'15145753.2268542982267254', 'priceUsd': '8.3214863847167534',  
'changePercent24Hr': '-0.0355964920152425', 'vwap24Hr':  
'8.4780229632854123', 'explorer': 'https://neotracker.io'}, {'id':  
'curve-dao-token', 'rank': '95', 'symbol': 'CRV', 'name': 'Curve DAO  
Token', 'supply': '1301146243.000000000000000000', 'maxSupply':  
'3030303030.299000000000000000', 'marketCapUsd':  
'577775549.3263215894539510', 'volumeUsd24Hr':  
'19649785.0487598368026128', 'priceUsd': '0.4440511990367570',  
'changePercent24Hr': '-3.7266677732659465', 'vwap24Hr':  
'0.4680834866162094', 'explorer':  
'https://etherscan.io/token/0xD533a949740bb3306d119CC777fa900bA034cd52  
'}, {'id': 'helium', 'rank': '96', 'symbol': 'HNT', 'name': 'Helium',  
'supply': '179761124.745105450000000000', 'maxSupply':  
'223000000.000000000000000000', 'marketCapUsd':  
'567212319.6847034905159093', 'volumeUsd24Hr':  
'716058.8701352840279750', 'priceUsd': '3.1553669932194146',  
'changePercent24Hr': '2.0503631583458440', 'vwap24Hr':  
'3.1735308121847929', 'explorer': 'https://explorer.helium.com/'},  
{'id': 'kava', 'rank': '97', 'symbol': 'KAVA', 'name': 'Kava',  
'supply': '1082853482.000000000000000000', 'maxSupply': None,  
'marketCapUsd': '561052723.5925271678757882', 'volumeUsd24Hr':  
'10727293.9073279761145023', 'priceUsd': '0.5181243196044201',  
'changePercent24Hr': '3.9439034322316603', 'vwap24Hr':  
'0.5079643934618957', 'explorer': 'https://www.mintscan.io/kava'},  
{'id': 'axie-infinity', 'rank': '98', 'symbol': 'AXS', 'name': 'Axie  
Infinity', 'supply': '159646968.762862350000000000', 'maxSupply': None,  
'marketCapUsd': '543201228.5405090744195444', 'volumeUsd24Hr':  
'8436988.0615080840968890', 'priceUsd': '3.4025151416897462',  
'changePercent24Hr': '0.2221832124678570', 'vwap24Hr':  
'3.4570240722279145', 'explorer':  
'https://etherscan.io/token/0xf5d669627376ebd411e34b98f19c868c8aba5ada  
'}, {'id': 'pyth-network', 'rank': '99', 'symbol': 'PYTH', 'name':  
'Pyth Network', 'supply': '3624987919.850000000000000000', 'maxSupply':  
None, 'marketCapUsd': '543046314.1401887440454660', 'volumeUsd24Hr':  
'14704928.5390851127069354', 'priceUsd': '0.1498063789858532',  
'changePercent24Hr': '-0.3305819583557725', 'vwap24Hr':  
'0.1536162040049761', 'explorer':  
'https://solscan.io/token/HZ1JovNiVvGrGNiiYvEozEVgZ58xaU3RKwX8eACQBct3  
'}, {'id': 'raydium', 'rank': '100', 'symbol': 'RAY', 'name':  
'Raydium', 'supply': '290847970.959334000000000000', 'maxSupply':
```

```
'555000000.0000000000000000', 'marketCapUsd':
'539751877.9863170796424671', 'volumeUsd24Hr':
'72677100.3635751347533669', 'priceUsd': '1.8557869811021804',
'changePercent24Hr': '1.8737898388710728', 'vwap24Hr':
'1.8778170454248490', 'explorer':
'https://explorer.solana.com/address/4k3Dyjjvzvp8eMZWUXbBCjEvwSkkk59S5i
CNLY3QrkX6R'}]], 'timestamp': 1742466780479}
```

```
cd=result2['data']
mydata=pd.DataFrame(cd)
mydata.head(10)
```

	id	rank	symbol	name	
supply \					
0	bitcoin	1	BTC	Bitcoin	19839400.0000000000000000
1	ethereum	2	ETH	Ethereum	120629195.4269564900000000
2	xrp	3	XRP	XRP	58108919817.0000000000000000
3	tether	4	USDT	Tether	143653509034.0653000000000000
4	binance-coin	5	BNB	BNB	144006830.0000000000000000
5	solana	6	SOL	Solana	510156044.0299182000000000
6	usd-coin	7	USDC	USDC	59242276090.4832400000000000
7	dogecoin	8	DOGE	Dogecoin	148504846383.7052600000000000
8	cardano	9	ADA	Cardano	35234797228.4508800000000000
9	tron	10	TRX	TRON	95016082389.9211600000000000

	maxSupply	marketCapUsd \
0	21000000.0000000000000000	1690642085530.0853481637253200
1	None	238734461075.7161446148298806
2	100000000000.0000000000000000	144191872011.1592730779322174
3	None	143663642526.7808607656955725
4	144006830.0000000000000000	90954338061.3573831468269190
5	None	66873314113.1331921167700411
6	None	59239061810.2627599880448739
7	None	25476794833.6981315002748224
8	45000000000.0000000000000000	25475750632.5413830738443589
9	None	21770104775.3306929123317061

	volumeUsd24Hr	priceUsd
changePercent24Hr \		
0	10294944841.8616370400283995	85216.3919034892863778
1	1.9836879808947798	

1	6729067228.2899936661334663	1979.0769575369908867
1.6520305999880752		
2	3357716503.8780937196576763	2.4814068556988622
7.1605573075624635		
3	25449713866.7556984106643171	1.0000705412125586
0.0983642425420199		
4	600713038.6357500759714707	631.5973906331899893
2.7715900498102202		
5	1414948574.7107678301201302	131.0840377090806233
3.4960381830251608		
6	7308950361.2822159828679514	0.9999457434718482
0.0118523738178789		
7	431306684.1415249718047652	0.1715553091639276
2.0294320254526730		
8	506665643.3468665003857583	0.7230281606948087
1.1911722975056992		
9	300785351.3049877347662649	0.2291202102607417
0.6001843190759570		

```
vwap24Hr
explorer
0 85242.5393622283315806
https://blockchain.info/
1 2024.2133024845636723
https://etherscan.io/
2 2.4928862050830814
https://xrpcharts.ripple.com/#/graph/
3 1.0000049550248507
https://www.omniexplorer.info/asset/31
4 618.9696781325982878
https://etherscan.io/token/0xB8c77482e45F1F44d...
5 131.8975376028978327
https://explorer.solana.com/
6 0.9998783674489655
https://etherscan.io/token/0xa0b86991c6218b36c...
7 0.1734732543432387
http://dogechain.info/chain/Dogecoin
8 0.7325503992467106
https://cardanoexplorer.com/
9 0.2308132350537269
https://tronscan.org/#/

mydata.to_csv(r"C:\Users\DELL\Downloads\result2.csv")

mydata.info()

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 100 entries, 0 to 99
Data columns (total 12 columns):
 #   Column                Non-Null Count  Dtype

```

```

---  -----
0   id          100 non-null  object
1   rank        100 non-null  object
2   symbol      100 non-null  object
3   name        100 non-null  object
4   supply      100 non-null  object
5   maxSupply   44 non-null  object
6   marketCapUsd 100 non-null  object
7   volumeUsd24Hr 100 non-null  object
8   priceUsd    100 non-null  object
9   changePercent24Hr 100 non-null  object
10  vwap24Hr    98 non-null  object
11  explorer    89 non-null  object

```

dtypes: object(12)

memory usage: 9.5+ KB

mydata.isnull().sum()

```

id          0
rank        0
symbol      0
name        0
supply      0
maxSupply   56
marketCapUsd 0
volumeUsd24Hr 0
priceUsd    0
changePercent24Hr 0
vwap24Hr    2
explorer    11

```

dtype: int64

mydata.dropna(inplace=True)

mydata.isnull().sum()

```

id          0
rank        0
symbol      0
name        0
supply      0
maxSupply   0
marketCapUsd 0
volumeUsd24Hr 0
priceUsd    0
changePercent24Hr 0
vwap24Hr    0
explorer    0

```

dtype: int64

mydata.describe(include='all')

	id	rank	symbol	name	supply	\
count	40	40	40	40	40	
unique	40	40	40	40	40	
top	bitcoin	1	BTC	Bitcoin	19839400.000000000000000000	
freq	1	1	1	1	1	

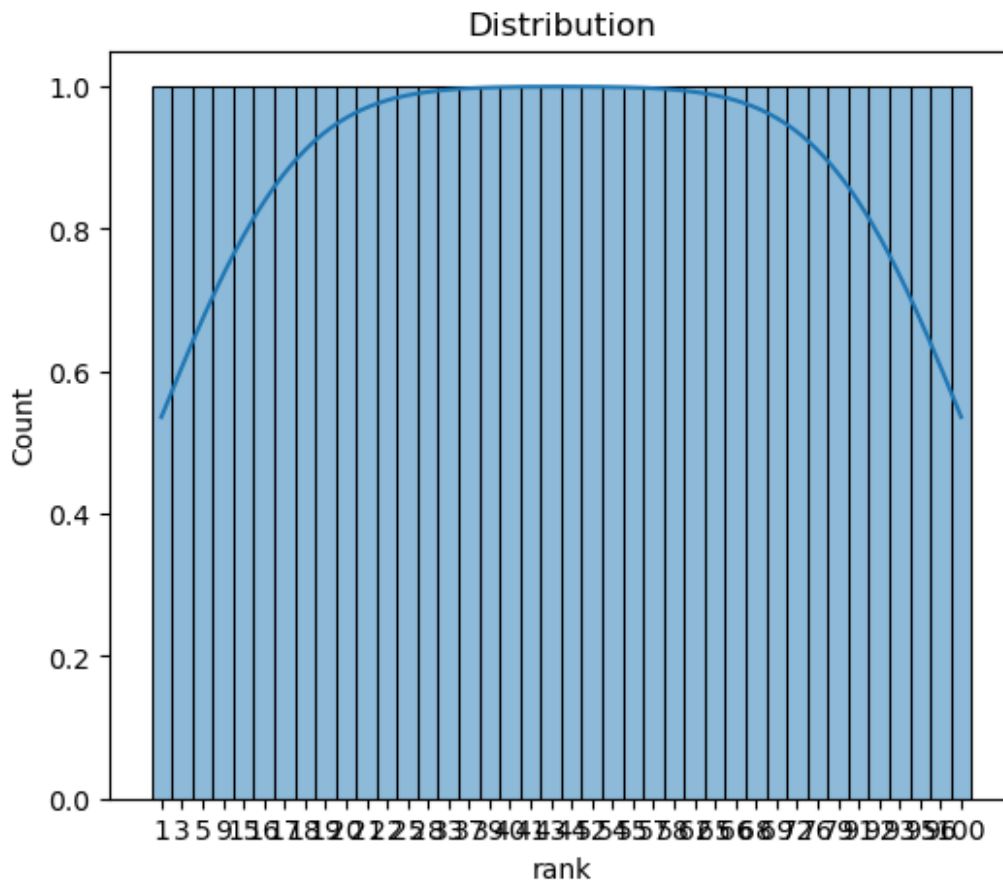
	maxSupply	marketCapUsd	\
count	40	40	
unique	33	40	
top	21000000.000000000000000000	1690642085530.0853481637253200	
freq	3	1	

	volumeUsd24Hr	priceUsd	\
count	40	40	
unique	40	40	
top	10294944841.8616370400283995	85216.3919034892863778	
freq	1	1	

	changePercent24Hr	vwap24Hr
explorer		
count	40	40
40		
unique	40	40
40		
top	1.9836879808947798	85242.5393622283315806
https://blockchain.info/		
freq	1	1
1		

```
plt.figure(figsize=(6,5))
sns.histplot(mydata["rank"],kde=True,bins=20)
plt.title("Distribution")
plt.show()
```

```
C:\Users\DELL\anaconda3\Lib\site-packages\seaborn\_oldcore.py:1119:
FutureWarning: use_inf_as_na option is deprecated and will be removed
in a future version. Convert inf values to NaN before operating
instead.
  with pd.option_context('mode.use_inf_as_na', True):
```



```
md=mydata.select_dtypes(include = ["number"])
md.head()
```

```
Empty DataFrame
Columns: []
Index: [0, 2, 4, 8, 14]
```

Create subset with price less than 2

```
mydata['priceUsd'] = mydata['priceUsd'].astype(float)
newdata = mydata[mydata['priceUsd'] < 2]
newdata.head()
```

	id	rank	symbol	name
supply \				
8	cardano	9	ADA	Cardano
35234797228.450880000000000000				
15	stellar	16	XLM	Stellar
30754554606.449593000000000000				
16	hedera-hashgraph	17	HBAR	Hedera
41903956526.000000000000000000				
19	shiba-inu	20	SHIB	Shiba Inu

```
589252943029396.8000000000000000
32      pepe      33      PEPE      Pepe
420689899653543.5600000000000000
```

	maxSupply	marketCapUsd \
8	45000000000.0000000000000000	25475750632.5413830738443589
15	50001806812.0000000000000000	8733322049.6956054695193025
16	50000000000.0000000000000000	8003807985.7870810750038754
19	589552695333683.0000000000000000	7495374127.0758649264170374
32	420690000000000.0000000000000000	3120284774.8644130889587537

	volumeUsd24Hr	priceUsd	changePercent24Hr \
8	506665643.3468665003857583	0.723028	1.1911722975056992
15	166330934.6178860568812096	0.283968	2.0051822651836799
16	110383975.0409056900729802	0.191004	0.9009513320328468
19	60446872.1299062676153712	0.000013	0.8445142824611307
32	461409118.9946561135115741	0.000007	2.1463291675977104

```

vwap24Hr
explorer
8  0.7325503992467106
https://cardanoexplorer.com/
15 0.2884719346732946
https://dashboard.stellar.org/
16 0.1942284329569353
https://app.dragonglass.me/hedera/home
19 0.0000128118079473
https://etherscan.io/token/0x95ad61b0a150d7921...
32 0.0000074128903163
https://etherscan.io/token/0x6982508145454ce32...
```

```
plt.figure(figsize=(30,8))
plt.scatter(newdata['name'],newdata['priceUsd'],color='green',marker='d')
plt.xlabel("Name")
plt.ylabel("Prize Usd")
plt.legend()
```

No artists with labels found to put in legend. Note that artists whose label start with an underscore are ignored when legend() is called with no argument.

```
<matplotlib.legend.Legend at 0x1429099a990>
```

