PDA_4_1

ENCODING¶

CONVERTING CATEGORIAL DATA INTO NUMERICAL DATA

In [62]:

import pandas as pd
import numpy as np

import matplotlib.pyplot as plt

import seaborn as sns

from sklearn.preprocessing import OneHotEncoder

In [64]:

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

Out[64]:

	Age	Gender	Educatio n Level	Job Title	Years of Experie nce	Salary
0	32.0	Male	Bachelor 's	Softwar e Enginee r	5.0	90000.0
1	28.0	Female	Master's	Data Analyst	3.0	65000.0
2	45.0	Male	PhD	Senior Manager	15.0	150000. 0
3	36.0	Female	Bachelor 's	Sales Associat e	7.0	60000.0
4	36.0	Female	Bachelor 's	Sales Associat e	7.0	60000.0

FILTER CATEGORIAL FEATURE¶

In [67]:

```
categorial_cols=["Education Level"]
```

DEFINE AND APPLY ENCODER¶

```
In [70]:
encoder=OneHotEncoder(drop=None, sparse_output=False)
In [72]:
encoder_data=encoder.fit_transform(df[categorial_cols])
In [74]:
print(encoder_data)
[[1. 0. 0. 0.]
      [0. 1. 0. 0.]
      [0. 0. 1. 0.]
      [1. 0. 0. 0.]
      [1. 0. 0. 0.]
      [1. 0. 0. 0.]
      [1. 0. 0. 0.]
      [1. 0. 0. 0.]
      [1. 0. 0. 0.]
      [1. 0. 0. 0.]
      [1. 0. 0. 0.]
      [1. 0. 0. 0.]
      [1. 0. 0. 0.]
      [1. 0. 0. 0.]
      [1. 0. 0. 0.]
      [1. 0. 0. 0.]
      [1. 0. 0. 0.]
      [1. 0. 0. 0.]
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      [1. 0.]
      [1. 0.]
      [
```

the encoded data is in the form of array. we need to convert encoded data into data frame

ENCODED DATA FRAME¶

```
In [105]:
encoded_df=pd.DataFrame(encoder_data,
columns=encoder.get_feature_names_out(categorial_cols))
encoded_df.head()
```

Out[105]:

	Education Level_Bachel or's	Education Level_Master 's	Education Level_PhD	Education Level_nan
0	1.0	0.0	0.0	0.0
1	0.0	1.0	0.0	0.0
2	0.0	0.0	1.0	0.0
3	1.0	0.0	0.0	0.0
4	1.0	0.0	0.0	0.0

In [107]:

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

Out[107]:

	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

In [111]:

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

Out[111]:

	Age	Gend er	Educ ation Level	Job Title	Years of Expe rienc e	Salar y	Educ ation Level _Bac helor 's	Educ ation Level _Mas ter's	Educ ation Level _PhD
0	32.0	Male	Bach elor's	Soft ware Engi neer	5.0	9000 0.0	1.0	0.0	0.0
1	28.0	Fema le	Mast er's	Data Anal yst	3.0	6500 0.0	0.0	1.0	0.0
2	45.0	Male	PhD	Senio r Mana ger	15.0	1500 00.0	0.0	0.0	1.0
3	36.0	Fema le	Bach elor's	Sales Asso ciate	7.0	6000 0.0	1.0	0.0	0.0
4	36.0	Fema le	Bach elor's	Sales Asso ciate	7.0	6000 0.0	1.0	0.0	0.0

LABEL ENCODER¶

In [114]:

from sklearn.preprocessing import LabelEncoder

In [120]:

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

Out[120]:

	Age	Gender	Educatio n Level	Job Title	Years of Experie nce	Salary
0	32.0	Male	Bachelor 's	Softwar e Enginee r	5.0	90000.0
1	28.0	Female	Master's	Data Analyst	3.0	65000.0
2	45.0	Male	PhD	Senior Manager	15.0	150000. 0
3	36.0	Female	Bachelor 's	Sales Associat e	7.0	60000.0
4	36.0	Female	Bachelor 's	Sales Associat e	7.0	60000.0

In [126]:

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

Out[126]:

		0 1	Educat ion	Job	Years of Experi	0.1	Gender
	Age	Gender	Level	Title	ence	Salary	_e
0	32.0	Male	Bachel or's	Softwa re Engine er	5.0	90000. 0	1

			Educat		Years of		
			ion	Job	Experi		Gender
	Age	Gender	Level	Title	ence	Salary	_e
1	28.0	Female	Master' s	Data Analyst	3.0	65000. 0	0
2	45.0	Male	PhD	Senior Manag er	15.0	15000 0.0	1
3	36.0	Female	Bachel or's	Sales Associa te	7.0	60000. 0	0
4	36.0	Female	Bachel or's	Sales Associa te	7.0	60000. 0	0

In [130]:

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

Out[130]:

	Age	Gende r	Educa tion Level	Job Title	Years of Exper ience	Salary	Gende r_e	Educa tion_e
0	32.0	Male	Bache lor's	Softw are Engin eer	5.0	9000 0.0	1	0
1	28.0	Femal e	Maste r's	Data Analy st	3.0	6500 0.0	0	1
2	45.0	Male	PhD	Senior Mana ger	15.0	1500 00.0	1	2
3	36.0	Femal e	Bache lor's	Sales Associ ate	7.0	6000 0.0	0	0
4	36.0	Femal e	Bache lor's	Sales Associ ate	7.0	6000 0.0	0	0

STANDARDIZATION¶

MIN-MAX SCALING

In [162]:

from sklearn.preprocessing import MinMaxScaler

In [164]:

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

Out[164]:

	Age	Gender	Educatio n Level	Job Title	Years of Experie nce	Salary
0	32.0	Male	Bachelor 's	Softwar e Enginee r	5.0	90000.0
1	28.0	Female	Master's	Data Analyst	3.0	65000.0
2	45.0	Male	PhD	Senior Manager	15.0	150000. 0
3	36.0	Female	Bachelor 's	Sales Associat e	7.0	60000.0
4	36.0	Female	Bachelor 's	Sales Associat e	7.0	60000.0

In [166]:

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

- - - - -

```
File ~\anaconda3\Lib\site-packages\sklearn\utils\ set output.py:140,
in wrap method output.<locals>.wrapped(self, X, *args, **kwargs)
    138 @wraps(f)
    139 def wrapped(self, X, *args, **kwargs):
            data to wrap = f(self, X, *args, **kwargs)
--> 140
    141
            if isinstance(data to wrap, tuple):
                # only wrap the first output for cross decomposition
    142
    143
                return (
    144
                    wrap data with container(method, data to wrap[0],
X, self),
    145
                    *data to wrap[1:],
    146
                )
File ~\anaconda3\Lib\site-packages\sklearn\base.py:878, in
TransformerMixin.fit_transform(self, X, y, **fit_params)
    874 # non-optimized default implementation; override when a better
    875 # method is possible for a given clustering algorithm
    876 if y is None:
            # fit method of arity 1 (unsupervised transformation)
    877
--> 878
            return self.fit(X, **fit params).transform(X)
    879 else:
            # fit method of arity 2 (supervised transformation)
    880
            return self.fit(X, y, **fit params).transform(X)
    881
File ~\anaconda3\Lib\site-packages\sklearn\preprocessing\ data.py:427,
in MinMaxScaler.fit(self, X, y)
    425 # Reset internal state before fitting
    426 self. reset()
--> 427 return self.partial fit(X, y)
File ~\anaconda3\Lib\site-packages\sklearn\preprocessing\ data.py:466,
in MinMaxScaler.partial fit(self, X, y)
    460
            raise TypeError(
    461
                "MinMaxScaler does not support sparse input. "
                "Consider using MaxAbsScaler instead."
    462
    463
    465 first pass = not hasattr(self, "n samples seen ")
--> 466 X = self. validate data(
    467
            Χ,
    468
            reset=first pass,
    469
            dtype=FLOAT DTYPES,
            force all finite="allow-nan",
    470
    471 )
    473 data min = np.nanmin(X, axis=0)
    474 \text{ data max} = \text{np.nanmax}(X, axis=0)
File ~\anaconda3\Lib\site-packages\sklearn\base.py:565, in
BaseEstimator. validate data(self, X, y, reset, validate separately,
**check params)
            raise ValueError("Validation should be done on X, y or
    563
```

```
both.")
    564 elif not no val X and no val y:
--> 565
            X = check_array(X, input_name="X", **check_params)
    566
            out = X
    567 elif no val X and not no val y:
File ~\anaconda3\Lib\site-packages\sklearn\utils\validation.py:902, in
check_array(array, accept_sparse, accept_large_sparse, dtype, order,
copy, force all finite, ensure 2d, allow nd, ensure min samples,
ensure min features, estimator, input name)
            # If input is 1D raise error
    900
    901
            if array.ndim == 1:
--> 902
                raise ValueError(
    903
                    "Expected 2D array, got 1D array instead:\
narray={}.\n"
    904
                    "Reshape your data either using array.reshape(-1,
1) if "
    905
                    "your data has a single feature or
array.reshape(1, -1)
    906
                    "if it contains a single sample.".format(array)
    907
    909 if dtype_numeric and array.dtype.kind in "USV":
            raise ValueError(
    910
                "dtype='numeric' is not compatible with arrays of
    911
bytes/strings."
                "Convert your data to numeric values explicitly
    912
instead."
    913
            )
ValueError: Expected 2D array, got 1D array instead:
array=[ 90000. 65000. 150000. 60000. 60000. 55000. 120000.
                                                                 80000.
60000.
                     nan 65000. 130000.
          75000.
                                          40000. 125000.
 110000.
                                                           90000.
115000.
  35000. 180000. 80000. 190000.
                                  50000.
                                          60000. 140000.
                                                           45000.
110000.
  40000. 140000.
                  90000. 250000.
                                  55000.
                                          75000.
                                                  65000. 170000.
45000.
  60000. 115000. 40000. 160000.
                                  80000. 190000.
                                                  60000.
                                                           45000.
130000.
  40000.
          75000. 180000. 120000.
                                  35000. 130000.
                                                  85000.
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200000.
  50000.
          95000. 65000. 140000.
                                  55000. 105000. 170000.
                                                           50000.
80000.
                  90000. 120000.
                                          90000. 150000.
 180000.
          35000.
                                  45000.
                                                           65000.
70000.
          40000. 120000.
                          95000. 160000. 100000. 180000.
 190000.
                                                           55000.
70000.
          30000. 250000.
                          40000.
                                  95000.
                                          45000.
                                                  80000. 135000.
  80000.
55000.
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40000. 105000. 170000.
 120000.
                                     75000.
                                             65000. 160000.
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90000.
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          45000.
                   95000. 150000.
                                     50000.
                                             80000. 220000.
                                                               50000.
60000.
 100000.
          40000. 110000.
                            95000. 130000.
                                             90000.
                                                      35000.
                                                               95000.
65000.
 170000.
          45000. 120000. 100000. 180000.
                                             50000.
                                                      80000. 140000.
40000.
  95000. 110000.
                   50000. 105000. 160000.
                                             45000. 100000. 160000.
35000.
  55000. 140000.
                   50000.
                            60000. 120000.
                                             40000. 110000.
                                                               50000.
135000.
  40000.
          90000. 150000.
                            60000.
                                     80000. 175000.
                                                      45000. 120000.
140000.
  35000.
          95000. 110000.
                            50000. 115000. 185000.
                                                      40000.
                                                               90000.
175000.
  45000.
          80000. 120000.
                            35000. 110000. 150000.
                                                      50000. 105000.
180000.
  40000.
              nan 140000.
                            45000.
                                     85000. 140000.
                                                      50000.
                                                               80000.
170000.
  40000. 105000. 145000.
                            40000.
                                     85000. 130000.
                                                      95000. 100000.
180000.
  35000.
          95000. 170000.
                            45000.
                                     95000. 120000.
                                                      40000.
                                                               90000.
155000.
  55000. 110000. 180000.
                            45000. 130000.
                                             45000.
                                                      90000. 160000.
50000.
 120000. 170000.
                   40000. 110000. 150000.
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                                                      85000. 130000.
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  95000. 180000.
                   35000. 100000. 170000.
                                             45000.
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40000.
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                                             45000. 120000.
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85000.
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                                     70000. 120000. 160000.
                                                               40000.
120000.
 150000.
          70000.
                   95000. 180000.
                                     50000.
                                             95000. 170000.
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110000.
 150000.
                   85000. 130000. 100000.
                                             95000. 180000.
                                                                 350.
          40000.
nan
 120000. 160000.
                   50000. 110000.
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110000.
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                   90000. 180000.
                                     40000. 120000. 160000.
          60000.
                                                               70000.
95000.
 180000.
          50000.
                   95000. 170000.
                                     35000. 100000. 150000.
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85000.
          65000. 110000. 180000.
 130000.
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                                             90000. 140000.
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130000.
 160000.
           40000. 100000. 180000.
                                     55000. 120000. 150000.
                                                               70000.
95000.
 180000.
          50000. 120000. 170000.
                                     35000. 100000. 150000.
                                                               60000.
85000.
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80000. 95000. 40000. 120000. 160000. 65000. 130000. 130000. 180000. 40000. 100000. 150000. 55000. 110000. 180000. 50000. 130000. 160000. 95000. 170000. 40000. 90000. 150000. 60000. 70000. 90000. 170000. 50000. 150000. 160000. 85000. 180000. 35000. 110000. 60000. 160000. 55000. 110000. 180000. 50000. 130000. 160000. 60000. 95000. 170000. 40000. 90000. 150000. 70000. 90000. 170000. 50000. 150000. 160000. 85000. 170000. 40000. 90000. 150000.]. 60000. Reshape your data either using array.reshape(-1, 1) if your data has a single feature or array.reshape(1, -1) if it contains a single sample.

Z-SCORE NOMALIZATION¶

In [177]:

from sklearn.preprocessing import StandardScaler

In [179]:

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

Out[179]:

| | Age | Gender | Educatio
n Level | Job Title | Years of
Experie
nce | Salary |
|---|------|--------|---------------------|-----------|----------------------------|---------|
| | | | | | | |
| 0 | 32.0 | Male | Bachelor | Softwar | 5.0 | 90000.0 |
| | | | 's | e
E .: | | |
| | | | | Enginee | | |
| | | | | r | | |
| 1 | 28.0 | Female | Master's | Data | 3.0 | 65000.0 |
| | | | | Analyst | | |
| 2 | 45.0 | Male | PhD | Senior | 15.0 | 150000. |
| | | | | Manager | | 0 |
| 3 | 36.0 | Female | Bachelor | Sales | 7.0 | 60000.0 |
| | | | 's | Associat | | |
| | | | | e | | |
| 4 | 36.0 | Female | Bachelor | Sales | 7.0 | 60000.0 |
| | | | 's | Associat | | |
| | | | | e | | |

```
In [181]:
n=StandardScalar()
df3['Salary s']=n.fit transform(df3['Salary'])
df3.head()
NameError
                                                 Traceback (most recent call
last)
Cell In[181], line 1
----> 1 n=StandardScalar()
       2 df3['Salary_s']=n.fit_transform(df3['Salary'])
       3 df3.head()
NameError: name 'StandardScalar' is not defined
WEATHER API¶
In [183]:
import requests
In [185]:
page=requests.get('http://api.weatherapi.com/v1/current.json?
key=1dd4e038dd00416d8dd90011252003&q=tumkur')
In [187]:
print(page)
<Response [200]>
In [189]:
result=page.json()
print(result)
{'location': {'name': 'Tumkur', 'region': 'Karnataka', 'country':
'India', 'lat': 13.3422, 'lon': 77.1017, 'tz_id': 'Asia/Kolkata', 'localtime_epoch': 1742462157, 'localtime': '2025-03-20 14:45'},
'current': {'last_updated_epoch': 1742462100, 'last updated': '2025-
03-20 14:45', '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}}
In [194]:
import requests
In [222]:
page=requests.get('http://api.coincap.io/v2/assets')
In [223]:
print(page)
<Response [200]>
In [272]:
result1=page.json()
print(result1)
{'data': [{'id': 'bitcoin', 'rank': '1', 'symbol': 'BTC', 'name':
'Bitcoin', 'supply': '19839400.000000000000000', 'maxSupply':
'21000000.0000000000000000', 'marketCapUsd':
'1702771822615.1184424241668600', 'volumeUsd24Hr':
'10137175091.6285812646981839', 'priceUsd': '85827.7882705685878819',
'changePercent24Hr': '2.7068089355416152', 'vwap24Hr':
'85242.5393622283315806', 'explorer': 'https://blockchain.info/'}, {'id': 'ethereum', 'rank': '2', 'symbol': 'ETH', 'name': 'Ethereum',
'supply': '120629195.4269564900000000', 'maxSupply': None,
'marketCapUsd': '241598400485.6756099455136889', 'volumeUsd24Hr':
'6619347538.0412704743556604', 'priceUsd': '2002.8186346643463515',
'changePercent24Hr': '2.9922570085744175', 'vwap24Hr':
'2024.2133024845636723', 'explorer': 'https://etherscan.io/'}, {'id':
'xrp', 'rank': '3', 'symbol': 'XRP', 'name': 'XRP', 'supply':
'58108919817.0000000000000000', 'maxSupply':
'10000000000.000000000000000', 'marketCapUsd':
'145606078627.0847983275735465', 'volumeUsd24Hr':
'3364818774.8753343302591056', 'priceUsd': '2.5057440249386145',
'changePercent24Hr': '8.1900543791347935', 'vwap24Hr': '2.4928862050830814', 'explorer':
'https://xrpcharts.ripple.com/#/graph/'}, {'id': 'tether', 'rank':
'4', 'symbol': 'USDT', 'name': 'Tether', 'supply':
'143653509034.0653000000000000', 'maxSupply': None, 'marketCapUsd':
'143709689151.9208610376939733', 'volumeUsd24Hr': '24661397516.7358648451870187', 'priceUsd': '1.0003910807207796',
'changePercent24Hr': '0.0966105726094282', 'vwap24Hr': '1.0000049550248507', 'explorer':
'https://www.omniexplorer.info/asset/31'}, {'id': 'binance-coin',
```

```
'144006830.000000000000000', 'marketCapUsd':
'90772319988.9478709218490470', 'volumeUsd24Hr':
'562400256.5853327884459792', 'priceUsd': '630.3334361915186309',
'changePercent24Hr': '2.4987790284305344', 'vwap24Hr':
'618.9696781325982878', 'explorer':
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'changePercent24Hr': '20.4603117508541893', 'vwap24Hr': '0.0059728674563361', 'explorer':
https://etherscan.io/token/0x85e076361cc813a908ff672f9bad1541474402b2
'}, {'id': 'neo', 'rank': '94', 'symbol': 'NEO', 'name': 'Neo',
'supply': '70538831.000000000000000', 'maxSupply': None,
'marketCapUsd': '594964747.5180381867356858', 'volumeUsd24Hr':
'15408689.8823008582528125', 'priceUsd': '8.4345705632410918',
'changePercent24Hr': '0.8708736159900068', 'vwap24Hr': '8.4780229632854123', 'explorer': 'https://neotracker.io'}, {'id':
'curve-dao-token', 'rank': '95', 'symbol': 'CRV', 'name': 'Curve DAO
Token', 'supply': '1301146243.000000000000000', 'maxSupply':
'3030303030.2990000000000000', 'marketCapUsd':
'583638036.9937742704225015', 'volumeUsd24Hr': '19810531.4039090720533442', 'priceUsd': '0.4485568322036605',
'changePercent24Hr': '-3.5249088211723446', 'vwap24Hr':
'0.4680834866162094', 'explorer':
'https://etherscan.io/token/0xD533a949740bb3306d119CC777fa900bA034cd52
'}, {'id': 'helium', 'rank': '96', 'symbol': 'HNT', 'name': 'Helium',
'supply': '179761124.7451054500000000', 'maxSupply':
'223000000.000000000000000', 'marketCapUsd': '579786318.6517681449949535', 'volumeUsd24Hr':
'712290.7253808659020649', 'priceUsd': '3.2253153704611242',
'changePercent24Hr': '4.2909780152281950', 'vwap24Hr':
'3.1735308121847929', 'explorer': 'https://explorer.helium.com/'}, {'id': 'kava', 'rank': '97', 'symbol': 'KAVA', 'name': 'Kava',
'supply': '1082853482.000000000000000', 'maxSupply': None,
'marketCapUsd': '563487452.1042011251170234', 'volumeUsd24Hr':
'10577442.2932318713703882', 'priceUsd': '0.5203727572297737',
'changePercent24Hr': '3.8169343713510002', 'vwap24Hr':
'0.5079643934618957', 'explorer': 'https://www.mintscan.io/kava'}, {'id': 'pyth-network', 'rank': '98', 'symbol': 'PYTH', 'name': 'Pyth
Network', 'supply': '3624987919.850000000000000', 'maxSupply': None,
'marketCapUsd': '551839759.1080643362165107', 'volumeUsd24Hr':
'14595918.4178131050218805', 'priceUsd': '0.1522321649918489',
'changePercent24Hr': '1.2275032925823036', 'vwap24Hr':
'0.1536162040049761', 'explorer':
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https://solscan.io/token/HZ1JovNiVvGrGNiiYvEozEVqZ58xaU3RKwX8eACOBCt3
'}, {'id': 'raydium', 'rank': '99', 'symbol': 'RAY', 'name':
'Raydium', 'supply': '290847970.959334000000000', 'maxSupply':
'555000000.0000000000000000', 'marketCapUsd': '550113947.8431033107597576', 'volumeUsd24Hr':
'73314587.7082326281127450', 'priceUsd': '1.8914140814825198',
'changePercent24Hr': '3.3609222308608243', 'vwap24Hr':
'1.8778170454248490', 'explorer':
'https://explorer.solana.com/address/4k3Dyjzvzp8eMZWUXbBCjEvwSkkk59S5i
CNLY3QrkX6R'}, {'id': 'axie-infinity', 'rank': '100', 'symbol': 'AXS',
'name': 'Axie Infinity', 'supply': '159646968.76286235000000000', 'maxSupply': None, 'marketCapUsd': '547765438.6902938407805165',
'volumeUsd24Hr': '8415369.0923213117400048', 'priceUsd':
'3.4311045360587955', 'changePercent24Hr': '0.9240244757080099',
'vwap24Hr': '3.4570240722279145', 'explorer':
'https://etherscan.io/token/0xf5d669627376ebd411e34b98f19c868c8aba5ada
'}], 'timestamp': 1742465306058}
In [274]:
cd=result1['data']
mydata=pd.DataFrame(cd)
mydata.head(10)
Out[274]:
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In [276]:

mydata.to_csv(r"C:\Users\DELL\Downloads\result1.csv")

In [278]:

mydata.isnull().sum()

Out[278]:

| 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 | |
| | |

In [280]:

mydata.dropna(inplace=True)
mydata.isnull().sum()

Out[280]:

| 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 | |

In [305]:

mydata.describe(include='all')

Out[305]:

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In [307]:

plt.figure(figsize=(25,20))

sns.histplot(mydata["rank"],kde=True,bins=20)

plt.title("DISTRIBUTION OF rank")

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):

No description has been provided for this image

In [315]:

mydata['priceUsd']=mydata['priceUsd'].astype(float)
newdata=mydata[mydata['priceUsd']<2]
newdata.head()</pre>

Out[315]:

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In [319]:

plt.figure(figsize=(30,8))
plt.scatter(newdata['name'],newdata['priceUsd'],color=['green'],marker

```
='^' )
plt.xlabel("name")
plt.ylabel("priceUsd")
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.

Out[319]:
<matplotlib.legend.Legend at 0x28bbce390d0>

No description has been provided for this image
```

In []: