

ongc

November 3, 2021

```
[10]: !pip install beautifulsoup4
```

Requirement already satisfied: beautifulsoup4 in c:\users\hp\anaconda3\lib\site-packages (4.9.3)

Requirement already satisfied: soupsieve>1.2 in c:\users\hp\anaconda3\lib\site-packages (from beautifulsoup4) (2.2.1)

```
[124]: import pandas as pd
import numpy as np
```

```
[11]: !pip install google
```

Requirement already satisfied: google in c:\users\hp\anaconda3\lib\site-packages (3.0.0)

Requirement already satisfied: beautifulsoup4 in c:\users\hp\anaconda3\lib\site-packages (from google) (4.9.3)

Requirement already satisfied: soupsieve>1.2 in c:\users\hp\anaconda3\lib\site-packages (from beautifulsoup4->google) (2.2.1)

```
[2]: try:
    from googlesearch import search
except ImportError:
    print("No module named 'google' found")

# to search
query = "ONGC Website Annual Report 2021"

for j in search(query, tld="co.in", num=10, stop=10, pause=2):
    print(j)
```

<https://www.ongcindia.com/wps/wcm/connect/en/investors/annual-reports/>
<https://www.ongcindia.com/wps/wcm/connect/en/investors/annual-reports/archive>
<https://www.ongcindia.com/wps/wcm/connect/en/about-ongc/performance/financial/Results/>
<https://www.ongcindia.com/wps/wcm/connect/en/investors/investor-presentation/>
<https://www.ongcindia.com/>
<https://www.ongcindia.com/wps/wcm/connect/en/about-ongc/performance/financial/Highlights/>

<https://www.ongcindia.com/wps/wcm/connect/hi/investors/annual-reports/>
<https://ongc.co.in/wps/wcm/connect/en/investors/annual-reports/>
<https://www.moneycontrol.com/financials/oilnaturalgascorporation/balance-sheetVI/ONG>
<https://economictimes.indiatimes.com/oil-and-natural-gas-corporation-ltd/balancesheet/companyid-11599.cms>

```
[1]: !pip install "camelot-py[cv]"
```

```
Requirement already satisfied: camelot-py[cv] in c:\users\hp\anaconda3\lib\site-packages (0.10.1)
Requirement already satisfied: tabulate>=0.8.9 in c:\users\hp\anaconda3\lib\site-packages (from camelot-py[cv]) (0.8.9)
Requirement already satisfied: openpyxl>=2.5.8 in c:\users\hp\anaconda3\lib\site-packages (from camelot-py[cv]) (3.0.7)
Requirement already satisfied: click>=6.7 in c:\users\hp\anaconda3\lib\site-packages (from camelot-py[cv]) (7.1.2)
Requirement already satisfied: pdfminer.six>=20200726 in c:\users\hp\anaconda3\lib\site-packages (from camelot-py[cv]) (20211012)
Requirement already satisfied: numpy>=1.13.3 in c:\users\hp\anaconda3\lib\site-packages (from camelot-py[cv]) (1.20.1)
Requirement already satisfied: pandas>=0.23.4 in c:\users\hp\anaconda3\lib\site-packages (from camelot-py[cv]) (1.2.4)
Requirement already satisfied: PyPDF2>=1.26.0 in c:\users\hp\anaconda3\lib\site-packages (from camelot-py[cv]) (1.26.0)
Requirement already satisfied: chardet>=3.0.4 in c:\users\hp\anaconda3\lib\site-packages (from camelot-py[cv]) (4.0.0)
Requirement already satisfied: pdftopng>=0.2.3 in c:\users\hp\anaconda3\lib\site-packages (from camelot-py[cv]) (0.2.3)
Requirement already satisfied: opencv-python>=3.4.2.17 in c:\users\hp\anaconda3\lib\site-packages (from camelot-py[cv]) (4.5.4.58)
Requirement already satisfied: ghostscript>=0.7 in c:\users\hp\anaconda3\lib\site-packages (from camelot-py[cv]) (0.7)
Requirement already satisfied: setuptools>=38.6.0 in c:\users\hp\anaconda3\lib\site-packages (from ghostscript>=0.7->camelot-py[cv]) (52.0.0.post20210125)
Requirement already satisfied: et-xmlfile in c:\users\hp\anaconda3\lib\site-packages (from openpyxl>=2.5.8->camelot-py[cv]) (1.0.1)
Requirement already satisfied: python-dateutil>=2.7.3 in c:\users\hp\anaconda3\lib\site-packages (from pandas>=0.23.4->camelot-py[cv]) (2.8.1)
Requirement already satisfied: pytz>=2017.3 in c:\users\hp\anaconda3\lib\site-packages (from pandas>=0.23.4->camelot-py[cv]) (2021.1)
Requirement already satisfied: cryptography in c:\users\hp\anaconda3\lib\site-packages (from pdfminer.six>=20200726->camelot-py[cv]) (3.4.7)
Requirement already satisfied: six>=1.5 in c:\users\hp\anaconda3\lib\site-packages (from python-dateutil>=2.7.3->pandas>=0.23.4->camelot-py[cv]) (1.15.0)
Requirement already satisfied: cffi>=1.12 in c:\users\hp\anaconda3\lib\site-
```

packages (from cryptography->pdfminer.six>=20200726->camelot-py[cv]) (1.14.5)
Requirement already satisfied: pyparser in c:\users\hp\anaconda3\lib\site-
packages (from cffi>=1.12->cryptography->pdfminer.six>=20200726->camelot-py[cv])
(2.20)

```
[2]: import camelot
```

```
[3]: #tables2=camelot.read_pdf('ONGC-Final_2021.
    ↪pdf', table_regions=['170,370,560,270'], pages='280-281')

tables2=camelot.read_pdf('ONGC-Final_2021.pdf', flavor='stream',
    ↪pages='280-281')
tables2
```

```
[3]: <TableList n=2>
```

```
[4]: tables2[0]
```

```
[4]: <Table shape=(83, 9)>
```

```
[5]: tables2[1]
```

```
[5]: <Table shape=(81, 11)>
```

```
[6]: print(tables2[0].df)
```

```

0                                     1 \
0                                THE UNSTOPPABLE
1                                ENERGY SOLDIERS
2      11.1.1 \nThe Company \nhas \nelected \nto \nc...
3      with the carrying value of its investmen...
4
.. ..
78      subscribed 10 nos. equity shares of Planys
79
80      Technologies \nPrivate \nLimited \na \nstartup
81
82      Company, having face value `10 per share

                                     2 \
0
1
2      at a premium of `25,430.00 per share. The
3      equity shares have been fair valued during
4
..
78      ...
79      as fair valued through other comprehensive
```

80
81 income (FVTOCI).
82

3 4 5 6 \

0
1
2 11.2 Details of Subsidiaries
3
4 Proportion of ownership interest/
..
78
79
80
81
82

7 8
0 ANNUAL REPORT
1 2020-21
2
3
4
.. ..
78
79
80
81
82

[83 rows x 9 columns]

```
[7]: print(tables2[1].df)
```

0 1 2 3 4 \
0 THE UNSTOPPABLE
1 ENERGY SOLDIERS
2 11.4 Details of Joint Ventures
3
4
..
76
77
78 Aggregate carrying value of unquoted investments 233.90
79
80

5 6 7 \

```

0
1
2
3
4 Proportion of ownership interest/
..          ... ..
76
77
78          220.69
79
80

8 \

0
1
2 11.5.1 During \nthe \nyear 2018-19, \nthe C...
3     had subscribed \nfor additional 1,179 nos.
4
..          ...
76     Convertible Preference Shares \n(CCPS) of
77 String Bio Private Limited (SBPL), a sta...
78
79     Company, having \nface value of `10 per
80 share at a premium of `267.30 per share.

9 10
0          ANNUAL REPORT
1          2020-21
2     The CCPS are Compulsory convertible into
3 equity shares upon the expiry of 20 years
4
..          ... ..
76
77 11.5.4. During \nthe \nyear 2019-20, \nthe ...
78
79     has \nsubscribed 19149 nos. Compulsory
80 Convertible Preference Shares \n(CCPS) of

```

[81 rows x 11 columns]

```
[4]: tables2[1].parsing_report
```

```
[4]: {'accuracy': 94.02, 'whitespace': 78.45, 'order': 1, 'page': 281}
```

```
[5]: tables2[0].parsing_report
```

```
[5]: {'accuracy': 94.66, 'whitespace': 76.57, 'order': 1, 'page': 280}
```

```
[6]: tables2.export('table.csv')
```

```
[7]: df3=tables2[0].df
```

```
[8]: df31=df3.iloc[16:34,[3,5,6]]
df31
#add column of subsidiary
```

```
[8]:
```

	3	5	6
16	ONGC Videsh Limited	Incorporated in India having	100.00%
17			
18		all operation outside India	
19			
20	Mangalore Refinery and	India	71.63%
21			
22	Petrochemicals Limited		
23			
24			
25	Hindustan Petroleum	India	53.64%
26			
27	Corporation Limited*		
28			
29	ONGC Mangalore	India	
30	Petrochemicals Limited		
31	(Note No. 11.1.2)		
32			
33	Petronet MHB Limited (Note	India	49.99%

```
[9]: df32=df31.reset_index(drop=True)
df32.head()
```

```
[9]:
```

	3	5	6
0	ONGC Videsh Limited	Incorporated in India having	100.00%
1			
2		all operation outside India	
3			
4	Mangalore Refinery and	India	71.63%

```
[10]: df31.columns=["Name of the Company", "Country of Incorporation", "Proportion of_
↳ownership interest as March 31, 2021"]
df31
```

```
[10]:
```

	Name of the Company	Country of Incorporation \
16	ONGC Videsh Limited	Incorporated in India having
17		
18		all operation outside India
19		

20	Mangalore Refinery and	India
21		
22	Petrochemicals Limited	
23		
24		
25	Hindustan Petroleum	India
26		
27	Corporation Limited*	
28		
29	ONGC Mangalore	India
30	Petrochemicals Limited	
31	(Note No. 11.1.2)	
32		
33	Petronet MHB Limited (Note	India

	Proportion of ownership interest as March 31, 2021
16	100.00%
17	
18	
19	
20	71.63%
21	
22	
23	
24	
25	53.64%
26	
27	
28	
29	
30	
31	
32	
33	49.99%

[11]: *#concatenate the string*

```
df31['Name of the Company']=df31.groupby(['Country of_
↳Incorporation','Proportion of ownership interest as March 31, 2021'])['Name_
↳of the Company'].transform(lambda x: ''.join(x))
df31 = df31.drop_duplicates()
df31=df31.reset_index(drop=True)
df31=df31.dropna()
df31
```

[11]:

0	Name of the Company \
	ONGC Videsh Limited

```

1 Petrochemicals LimitedCorporation Limited*Petr...
2
3             Mangalore Refinery and
4             Hindustan Petroleum
5             ONGC Mangalore
6             Petronet MHB Limited (Note

```

```

Country of Incorporation \
0 Incorporated in India having
1
2 all operation outside India
3             India
4             India
5             India
6             India

```

```

Proportion of ownership interest as March 31, 2021
0             100.00%
1
2
3             71.63%
4             53.64%
5
6             49.99%

```

```
[ ]:
```

```

[16]: df4=tables2[0].df
df41=df4.iloc[61:69,[3,5,6]]
df41
#add column of associate

```

```

[16]:
61      Pawan Hans Limited  India  49.00%
62
63
64      Petronet LNG Limited*  India  12.50%
65
66
67
68      Rohini Heliport Limited  India  49.00%

```

```

[17]: df42=df41.reset_index(drop=True)

```

```

[18]: df42.columns=["Name of the Company", "Country of Incorporation","Proportion of_
↳ownership interest as March 31, 2021"]
df42

```



```
[18]:      Name of the Company Country of Incorporation \
0      Pawan Hans Limited India
1
2
3      Petronet LNG Limited* India
4
5
6
7      Rohini Heliport Limited India

      Proportion of ownership interest as March 31, 2021
0
1      49.00%
2
3      12.50%
4
5
6
7      49.00%
```

```
[19]: #concatenate the string
df42['Proportion of ownership interest as March 31, 2021']=df42.groupby(['Name_
↳of the Company','Country of Incorporation'])['Proportion of ownership_
↳interest as March 31, 2021'].transform(lambda x: ''.join(x))
df42 = df42.drop_duplicates()

df42=df42.reset_index(drop=True)
df42=df42.dropna()
df42
```

```
[19]:      Name of the Company Country of Incorporation \
0      Pawan Hans Limited India
1
2      Petronet LNG Limited* India
3      Rohini Heliport Limited India

      Proportion of ownership interest as March 31, 2021
0
1      49.00%
2      12.50%
3      49.00%
```

```
[20]: df6=tables2[1].df
df6.head()
```

```
[20]: 0      1 2 3 4 \
0      THE UNSTOPPABLE
```

1 ENERGY SOLDIERS
2 11.4 Details of Joint Ventures

3
4

5 6 7 \

0
1
2
3

4 Proportion of ownership interest/

8 \

0
1
2
3
4

11.5.1 During \nthe \nyear 2018-19, \nthe C...
had subscribed \nfor additional 1,179 nos.

9 10

0
1
2
3
4

ANNUAL REPORT
2020-21

The CCPS are Compulsory convertible into
equity shares upon the expiry of 20 years

```
[21]: df6=tables2[1].df
df61=df6.iloc[13:31,[1,2,5]]
```

```
[22]: df62=df61.reset_index(drop=True)
df62
#add column of joint venture
```

```
[22]:
```

	1	2	5
0	Mangalore SEZ Limited\nSpecial Economic Zone	India	26.00%
1			
2	ONGC Petro Additions		
3	Petrochemicals	India	49.36%
4	Limited		
5			
6	ONGC Teri Biotech Limited\nBioremediation	India	49.98%
7			
8	ONGC Tripura Power		
9	Power Generation	India	50.00%
10	Company Limited		
11			
12			

13	Dahej SEZ Limited\nSpecial Economic Zone	India	50.00%
14			
15	Indradhanush Gas Grid		
16	Pipeline	India	20.00%
17	Limited		

```
[23]: df62.columns=["Name of the Company", "Country of Incorporation", "Proportion of_ownership interest as March 31, 2021"]
df62
```

```
[23]:
```

	Name of the Company	Country of Incorporation	\
0	Mangalore SEZ Limited\nSpecial Economic Zone	India	
1			
2	ONGC Petro Additions		
3	Petrochemicals	India	
4	Limited		
5			
6	ONGC Teri Biotech Limited\nBioremediation	India	
7			
8	ONGC Tripura Power		
9	Power Generation	India	
10	Company Limited		
11			
12			
13	Dahej SEZ Limited\nSpecial Economic Zone	India	
14			
15	Indradhanush Gas Grid		
16	Pipeline	India	
17	Limited		

	Proportion of ownership interest as March 31, 2021
0	26.00%
1	
2	
3	49.36%
4	
5	
6	49.98%
7	
8	
9	50.00%
10	
11	
12	
13	50.00%
14	
15	

16 20.00%

17

```
[24]: #concatenate the string
df62['Proportion of ownership interest as March 31, 2021']=df62.groupby(['Name_
↳of the Company','Country of Incorporation'])['Proportion of ownership_
↳interest as March 31, 2021'].transform(lambda x: ''.join(x))
df62 = df62.drop_duplicates()

df62=df62.reset_index(drop=True)
df62=df62.dropna()
df62
```

```
[24]:
```

	Name of the Company	Country of Incorporation \
0	Mangalore SEZ Limited\nSpecial Economic Zone	India
1		
2	ONGC Petro Additions	
3	Petrochemicals	India
4	Limited	
5	ONGC Teri Biotech Limited\nBioremediation	India
6	ONGC Tripura Power	
7	Power Generation	India
8	Company Limited	
9	Dahej SEZ Limited\nSpecial Economic Zone	India
10	Indradhanush Gas Grid	
11	Pipeline	India

	Proportion of ownership interest as March 31, 2021
0	26.00%
1	
2	
3	49.36%
4	
5	49.98%
6	
7	50.00%
8	
9	50.00%
10	
11	20.00%

```
[25]: df62['Proportion of ownership interest as March 31, 2021']=df62.groupby(['Name_
↳of the Company','Country of Incorporation'])['Proportion of ownership_
↳interest as March 31, 2021'].transform(lambda x: ''.join(x))
df62 = df62.drop_duplicates()

df62=df62.reset_index(drop=True)
```

```
df62=df62.dropna()
df62
```

```
[25]:
```

	Name of the Company	Country of Incorporation \
0	Mangalore SEZ Limited\nSpecial Economic Zone	India
1		
2	ONGC Petro Additions	
3	Petrochemicals	India
4	Limited	
5	ONGC Teri Biotech Limited\nBioremediation	India
6	ONGC Tripura Power	
7	Power Generation	India
8	Company Limited	
9	Dahej SEZ Limited\nSpecial Economic Zone	India
10	Indradhanush Gas Grid	
11	Pipeline	India

	Proportion of ownership interest as March 31, 2021
0	26.00%
1	
2	
3	49.36%
4	
5	49.98%
6	
7	50.00%
8	
9	50.00%
10	
11	20.00%

```
[154]: # concat dataframes
df7=pd.concat([df31, df42,df62], axis=0)
df7.head()
```

```
[154]:
```

	Name of the Company \
0	ONGC Videsh Limited
1	Petrochemicals LimitedCorporation Limited*Petr...
2	
3	Mangalore Refinery and
4	Hindustan Petroleum

	Country of Incorporation \
0	Incorporated in India having
1	
2	all operation outside India
3	India

	India
Proportion of ownership interest as March 31, 2021	
0	100.00%
1	
2	
3	71.63%
4	53.64%

```
[33]: !pip install two-lists-similarity
```

```
Collecting two-lists-similarity
  Downloading two_lists_similarity-0.0.5-py3-none-any.whl (6.3 kB)
Installing collected packages: two-lists-similarity
Successfully installed two-lists-similarity-0.0.5
```

```
[106]: !pip install fuzzywuzzy
```

```
Requirement already satisfied: fuzzywuzzy in c:\users\hp\anaconda3\lib\site-
packages (0.18.0)
```

```
[155]: from fuzzywuzzy import fuzz
        from fuzzywuzzy import process
```

```
[156]: match1 = []
        match2 = []
        k = []

        myList1 = df7['Name of the Company'].tolist()
        myList2 = df31['Name of the Company'].tolist()

        threshold = 100

        for i in myList1:
            match1.append(process.extractOne(i, myList2, scorer=fuzz.ratio))
        df7['matches'] = match1
        for j in df7['matches']:
            if j[1] >= threshold:
                k.append("Yes")
            match2.append("No".join(k))
            k = []

        # saving matches to df1
        df7['matches'] = match2
        #df7['Matched subsidiary name'] = match3
```

```
print("\nMatches...")
df7
```

WARNING:root:Applied processor reduces input query to empty string, all comparisons will have score 0. [Query: '']
 WARNING:root:Applied processor reduces input query to empty string, all comparisons will have score 0. [Query: '']
 WARNING:root:Applied processor reduces input query to empty string, all comparisons will have score 0. [Query: '']

Matches...

```
[156]:
0                                     Name of the Company \
1      Petrochemicals LimitedCorporation Limited*Petr...
2
3                                     Mangalore Refinery and
4                                     Hindustan Petroleum
5                                     ONGC Mangalore
6      Petronet MHB Limited (Note
0      Pawan Hans Limited
1
2      Petronet LNG Limited*
3      Rohini Heliport Limited
0      Mangalore SEZ Limited\nSpecial Economic Zone
1
2      ONGC Petro Additions
3      Petrochemicals
4      Limited
5      ONGC Teri Biotech Limited\nBioremediation
6      ONGC Tripura Power
7      Power Generation
8      Company Limited
9      Dahej SEZ Limited\nSpecial Economic Zone
10     Indradhanush Gas Grid
11     Pipeline
```

```

Country of Incorporation \
0      Incorporated in India having
1
2      all operation outside India
3      India
4      India
5      India
6      India
0      India
1
```

2	India
3	India
0	India
1	
2	
3	India
4	
5	India
6	
7	India
8	
9	India
10	
11	India

	Proportion of ownership interest as March 31, 2021	matches
0	100.00%	Yes
1		Yes
2		Yes
3	71.63%	Yes
4	53.64%	Yes
5		Yes
6	49.99%	Yes
0	49.00%	
1		Yes
2	12.50%	
3	49.00%	
0	26.00%	
1		Yes
2		
3	49.36%	
4		
5	49.98%	
6		
7	50.00%	
8		
9	50.00%	
10		
11	20.00%	

```
[157]: match1 = []
match2 = []
k = []

myList1 = df7['Name of the Company'].tolist()
myList2 = df31['Name of the Company'].tolist()
```



```

threshold = 100
for i in myList1:
    match1.append(process.extractOne(i, myList2, scorer=fuzz.ratio))
df7['Matched subsidiary name'] = match1
for j in df7['Matched subsidiary name']:
    if j[1] >= threshold:
        k.append(j[0])
    match2.append(",".join(k))
    k = []

# saving matches to df1
df7['Matched subsidiary name'] = match2
#df7['Matched subsidiary name'] = match3
print("\nMatches...")
df7

```

WARNING:root:Applied processor reduces input query to empty string, all comparisons will have score 0. [Query: '']
 WARNING:root:Applied processor reduces input query to empty string, all comparisons will have score 0. [Query: '']
 WARNING:root:Applied processor reduces input query to empty string, all comparisons will have score 0. [Query: '']

Matches...

```

[157]:
0                                     Name of the Company \
1                                     ONGC Videsh Limited
2
3                                     Petrochemicals LimitedCorporation Limited*Petr...
4
5                                     Mangalore Refinery and
6                                     Hindustan Petroleum
7                                     ONGC Mangalore
8                                     Petronet MHB Limited (Note
9                                     Pawan Hans Limited
10
11                                    Petronet LNG Limited*
12                                    Rohini Heliport Limited
13
14                                    Mangalore SEZ Limited\nSpecial Economic Zone
15
16                                    ONGC Petro Additions
17                                    Petrochemicals
18                                    Limited
19                                    ONGC Teri Biotech Limited\nBioremediation
20                                    ONGC Tripura Power
21                                    Power Generation

```

8	Company Limited
9	Dahej SEZ Limited\nSpecial Economic Zone
10	Indradhanush Gas Grid
11	Pipeline

	Country of Incorporation \
0	Incorporated in India having
1	
2	all operation outside India
3	India
4	India
5	India
6	India
0	India
1	
2	India
3	India
0	India
1	
2	
3	India
4	
5	India
6	
7	India
8	
9	India
10	
11	India

	Proportion of ownership interest as March 31, 2021 matches \
0	100.00% Yes
1	Yes
2	Yes
3	71.63% Yes
4	53.64% Yes
5	Yes
6	49.99% Yes
0	49.00%
1	Yes
2	12.50%
3	49.00%
0	26.00%
1	Yes
2	
3	49.36%
4	

5	49.98%
6	
7	50.00%
8	
9	50.00%
10	
11	20.00%

	Matched subsidiary name
0	ONGC Videsh Limited
1	Petrochemicals LimitedCorporation Limited*Petr...
2	
3	Mangalore Refinery and
4	Hindustan Petroleum
5	ONGC Mangalore
6	Petronet MHB Limited (Note
0	
1	
2	
3	
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	

```
[158]: df7=df7.reset_index(drop=True)
```

```
[160]: df7
```

```
[160]:
```

	Name of the Company \
0	ONGC Videsh Limited
1	Petrochemicals LimitedCorporation Limited*Petr...
2	
3	Mangalore Refinery and
4	Hindustan Petroleum
5	ONGC Mangalore
6	Petronet MHB Limited (Note
7	Pawan Hans Limited
8	

9	Petronet LNG Limited*
10	Rohini Heliport Limited
11	Mangalore SEZ Limited\nSpecial Economic Zone
12	
13	ONGC Petro Additions
14	Petrochemicals
15	Limited
16	ONGC Teri Biotech Limited\nBioremediation
17	ONGC Tripura Power
18	Power Generation
19	Company Limited
20	Dahej SEZ Limited\nSpecial Economic Zone
21	Indradhanush Gas Grid
22	Pipeline

	Country of Incorporation \
0	Incorporated in India having
1	
2	all operation outside India
3	India
4	India
5	India
6	India
7	India
8	
9	India
10	India
11	India
12	
13	
14	India
15	
16	India
17	
18	India
19	
20	India
21	
22	India

	Proportion of ownership interest as March 31, 2021 matches \
0	100.00% Yes
1	Yes
2	Yes
3	71.63% Yes
4	53.64% Yes
5	Yes

6	49.99%	Yes
7	49.00%	
8		Yes
9	12.50%	
10	49.00%	
11	26.00%	
12		Yes
13		
14	49.36%	
15		
16	49.98%	
17		
18	50.00%	
19		
20	50.00%	
21		
22	20.00%	

	Matched subsidiary name
0	ONGC Videsh Limited
1	Petrochemicals LimitedCorporation Limited*Petr...
2	
3	Mangalore Refinery and
4	Hindustan Petroleum
5	ONGC Mangalore
6	Petronet MHB Limited (Note
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	

```
[162]: update_df = df7.drop([8, 12])
```

```
[162]:
0      Name of the Company \
      ONGC Videsh Limited
```

1	Petrochemicals Limited	Corporation Limited*Petr...
2		
3		Mangalore Refinery and
4		Hindustan Petroleum
5		ONGC Mangalore
6		Petronet MHB Limited (Note
7		Pawan Hans Limited
9		Petronet LNG Limited*
10		Rohini Heliport Limited
11	Mangalore SEZ Limited\n	Special Economic Zone
13		ONGC Petro Additions
14		Petrochemicals
15		Limited
16	ONGC Teri Biotech Limited\n	Bioremediation
17		ONGC Tripura Power
18		Power Generation
19		Company Limited
20	Dahej SEZ Limited\n	Special Economic Zone
21		Indradhanush Gas Grid
22		Pipeline

	Country of Incorporation \
0	Incorporated in India having
1	
2	all operation outside India
3	India
4	India
5	India
6	India
7	India
9	India
10	India
11	India
13	
14	India
15	
16	India
17	
18	India
19	
20	India
21	
22	India

	Proportion of ownership interest as March 31, 2021 matches \
0	100.00% Yes
1	Yes

2		Yes
3	71.63%	Yes
4	53.64%	Yes
5		Yes
6	49.99%	Yes
7	49.00%	
9	12.50%	
10	49.00%	
11	26.00%	
13		
14	49.36%	
15		
16	49.98%	
17		
18	50.00%	
19		
20	50.00%	
21		
22	20.00%	

	Matched subsidiary name
0	ONGC Videsh Limited
1	Petrochemicals LimitedCorporation Limited*Petr...
2	
3	Mangalore Refinery and
4	Hindustan Petroleum
5	ONGC Mangalore
6	Petronet MHB Limited (Note
7	
9	
10	
11	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	

```
[163]: update_df.reset_index(drop=True)
```

```
[163]:
0      Name of the Company \
      ONGC Videsh Limited
```

1	Petrochemicals Limited	Corporation Limited*Petr...
2		
3		Mangalore Refinery and
4		Hindustan Petroleum
5		ONGC Mangalore
6		Petronet MHB Limited (Note
7		Pawan Hans Limited
8		Petronet LNG Limited*
9		Rohini Heliport Limited
10	Mangalore SEZ Limited\n	Special Economic Zone
11		ONGC Petro Additions
12		Petrochemicals
13		Limited
14	ONGC Teri Biotech Limited\n	Bioremediation
15		ONGC Tripura Power
16		Power Generation
17		Company Limited
18	Dahej SEZ Limited\n	Special Economic Zone
19		Indradhanush Gas Grid
20		Pipeline

	Country of Incorporation \
0	Incorporated in India having
1	
2	all operation outside India
3	India
4	India
5	India
6	India
7	India
8	India
9	India
10	India
11	
12	India
13	
14	India
15	
16	India
17	
18	India
19	
20	India

	Proportion of ownership interest as March 31, 2021 matches \
0	100.00% Yes
1	Yes

2		Yes
3	71.63%	Yes
4	53.64%	Yes
5		Yes
6	49.99%	Yes
7	49.00%	
8	12.50%	
9	49.00%	
10	26.00%	
11		
12	49.36%	
13		
14	49.98%	
15		
16	50.00%	
17		
18	50.00%	
19		
20	20.00%	

	Matched subsidiary name
0	ONGC Videsh Limited
1	Petrochemicals LimitedCorporation Limited*Petr...
2	
3	Mangalore Refinery and
4	Hindustan Petroleum
5	ONGC Mangalore
6	Petronet MHB Limited (Note
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	

```
[169]: update_df['matches']=update_df['matches'].replace(r'^\s*$', np.nan, regex=True)
update_df
```

[169]:

	Name of the Company \
0	ONGC Videsh Limited
1	Petrochemicals Limited Corporation Limited*Petr...
2	
3	Mangalore Refinery and
4	Hindustan Petroleum
5	ONGC Mangalore
6	Petronet MHB Limited (Note
7	Pawan Hans Limited
9	Petronet LNG Limited*
10	Rohini Heliport Limited
11	Mangalore SEZ Limited\nSpecial Economic Zone
13	ONGC Petro Additions
14	Petrochemicals
15	Limited
16	ONGC Teri Biotech Limited\nBioremediation
17	ONGC Tripura Power
18	Power Generation
19	Company Limited
20	Dahej SEZ Limited\nSpecial Economic Zone
21	Indradhanush Gas Grid
22	Pipeline

	Country of Incorporation \
0	Incorporated in India having
1	
2	all operation outside India
3	India
4	India
5	India
6	India
7	India
9	India
10	India
11	India
13	
14	India
15	
16	India
17	
18	India
19	
20	India
21	
22	India

Proportion of ownership interest as March 31, 2021 matches \

0	100.00%	Yes
1		Yes
2		Yes
3	71.63%	Yes
4	53.64%	Yes
5		Yes
6	49.99%	Yes
7	49.00%	NaN
9	12.50%	NaN
10	49.00%	NaN
11	26.00%	NaN
13		NaN
14	49.36%	NaN
15		NaN
16	49.98%	NaN
17		NaN
18	50.00%	NaN
19		NaN
20	50.00%	NaN
21		NaN
22	20.00%	NaN

	Matched subsidiary name
0	ONGC Videsh Limited
1	Petrochemicals LimitedCorporation Limited*Petr...
2	
3	Mangalore Refinery and
4	Hindustan Petroleum
5	ONGC Mangalore
6	Petronet MHB Limited (Note
7	
9	
10	
11	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	

```
[170]: update_df['matches'] = update_df['matches'].replace(np.nan, 'No')
update_df
```

[170]:

	Name of the Company \
0	ONGC Videsh Limited
1	Petrochemicals Limited Corporation Limited*Petr...
2	
3	Mangalore Refinery and
4	Hindustan Petroleum
5	ONGC Mangalore
6	Petronet MHB Limited (Note
7	Pawan Hans Limited
9	Petronet LNG Limited*
10	Rohini Heliport Limited
11	Mangalore SEZ Limited\nSpecial Economic Zone
13	ONGC Petro Additions
14	Petrochemicals
15	Limited
16	ONGC Teri Biotech Limited\nBioremediation
17	ONGC Tripura Power
18	Power Generation
19	Company Limited
20	Dahej SEZ Limited\nSpecial Economic Zone
21	Indradhanush Gas Grid
22	Pipeline

	Country of Incorporation \
0	Incorporated in India having
1	
2	all operation outside India
3	India
4	India
5	India
6	India
7	India
9	India
10	India
11	India
13	
14	India
15	
16	India
17	
18	India
19	
20	India
21	
22	India

Proportion of ownership interest as March 31, 2021 matches \

0	100.00%	Yes
1		Yes
2		Yes
3	71.63%	Yes
4	53.64%	Yes
5		Yes
6	49.99%	Yes
7	49.00%	No
9	12.50%	No
10	49.00%	No
11	26.00%	No
13		No
14	49.36%	No
15		No
16	49.98%	No
17		No
18	50.00%	No
19		No
20	50.00%	No
21		No
22	20.00%	No

	Matched subsidiary name
0	ONGC Videsh Limited
1	Petrochemicals LimitedCorporation Limited*Petr...
2	
3	Mangalore Refinery and
4	Hindustan Petroleum
5	ONGC Mangalore
6	Petronet MHB Limited (Note
7	
9	
10	
11	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	

[]: