

In [7]:

```
import pandas as pd
import pytrends
from pytrends.request import TrendReq
```

In [9]:

```
pytrends = TrendReq(hl='en-US', tz=360)
```

In [10]:

```
pytrends.build_payload(kw_list = ['machine learning' , 'data science',
                                  'python'])
```

In [11]:

```
data = pytrends.interest_by_region()
```

In [25]:

```
data.sort_values(by = ['machine learning' , 'data science',
                       'python'], ascending = False)
```

Out[25]:

|                | machine learning | data science | python |
|----------------|------------------|--------------|--------|
| geoName        |                  |              |        |
| Bangladesh     | 11               | 6            | 83     |
| Pakistan       | 10               | 9            | 81     |
| Malaysia       | 9                | 8            | 83     |
| India          | 9                | 7            | 84     |
| Indonesia      | 9                | 7            | 84     |
| ...            | ...              | ...          | ...    |
| Western Sahara | 0                | 0            | 0      |
| Yemen          | 0                | 0            | 0      |
| Zambia         | 0                | 0            | 0      |
| Zimbabwe       | 0                | 0            | 0      |
| Aland Islands  | 0                | 0            | 0      |

250 rows × 3 columns

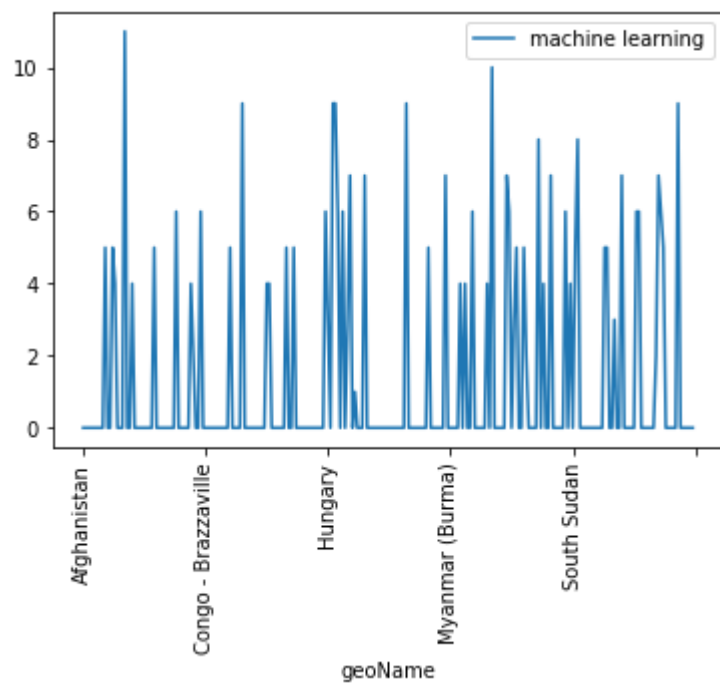
In [19]:

```
import seaborn as sns
import matplotlib.pyplot as plt
```

In [32]:

```
plt.figure(figsize=(20,10))
data.reset_index().plot(y = 'machine learning', x = 'geoName')
plt.xticks(rotation = 90)
plt.show()
```

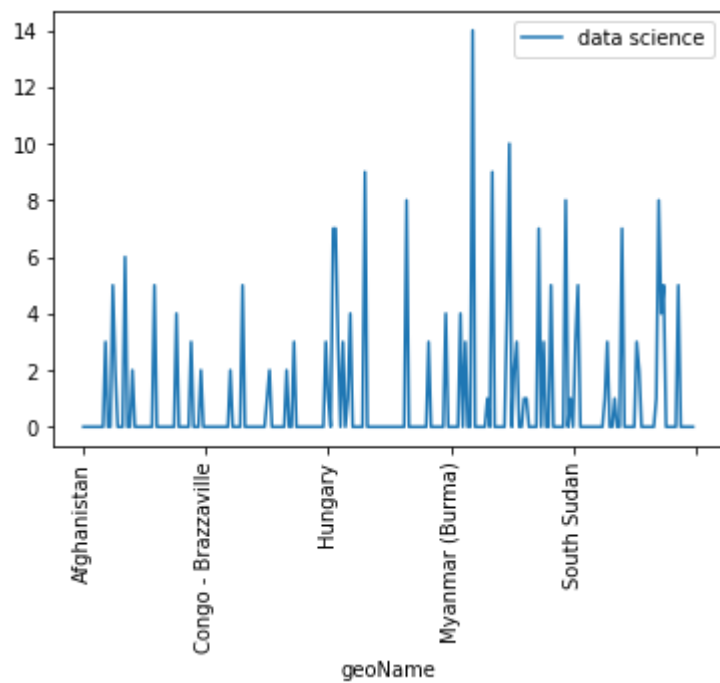
&lt;Figure size 1440x720 with 0 Axes&gt;



In [33]:

```
plt.figure(figsize=(20,10))
data.reset_index().plot(y = 'data science', x = 'geoName')
plt.xticks(rotation = 90)
plt.show()
```

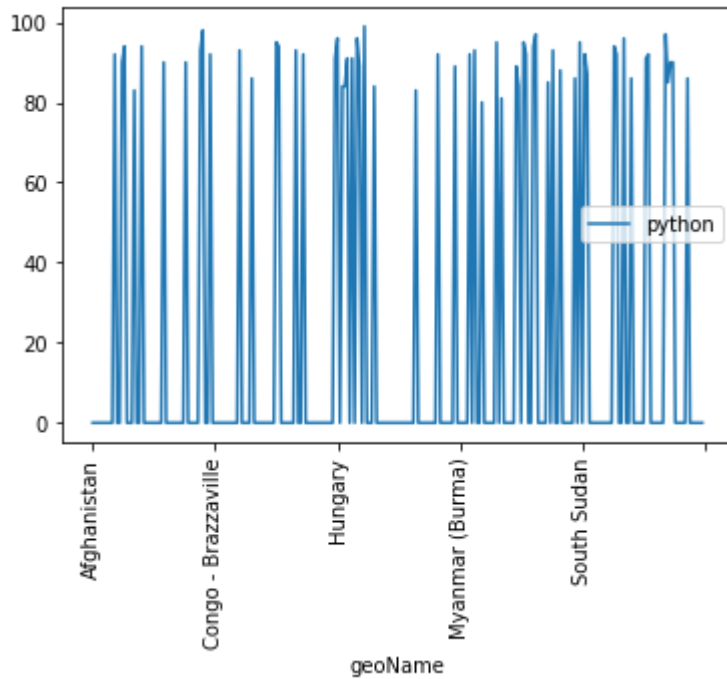
&lt;Figure size 1440x720 with 0 Axes&gt;



In [34]:

```
plt.figure(figsize=(20,10))
data.reset_index().plot(y = 'python', x = 'geoName')
plt.xticks(rotation = 90)
plt.show()
```

&lt;Figure size 1440x720 with 0 Axes&gt;



In [36]:

```
data_india = pytrends.trending_searches(pn = 'india')
```

In [37]:

```
data_india.head()
```

Out[37]:

|   | 0                       |
|---|-------------------------|
| 0 | RCB vs CSK              |
| 1 | Real Madrid vs Man City |
| 2 | LIC IPO                 |
| 3 | Moon Knight episode 6   |
| 4 | Repo Rate               |

In [38]:



```
data_india.tail()
```

Out[38]:

|    | 0                |
|----|------------------|
| 15 | Shigella         |
| 16 | Fed meeting      |
| 17 | Roe vs Wade      |
| 18 | Conway           |
| 19 | What is Met Gala |

In [41]:



```
top_data = pytrends.top_charts(2021, hl = 'en-us', tz = 300, geo = 'GLOBAL')
```

In [42]:



```
top_data.head()
```

Out[42]:

|   | title              | exploreQuery |
|---|--------------------|--------------|
| 0 | Australia vs India |              |
| 1 | India vs England   |              |
| 2 | IPL                |              |
| 3 | NBA                |              |
| 4 | Euro 2021          |              |

In [43]:



```
top_data.tail()
```

Out[43]:

|   | title                | exploreQuery |
|---|----------------------|--------------|
| 5 | Copa América         | Copa America |
| 6 | India vs New Zealand |              |
| 7 | T20 World Cup        |              |
| 8 | Squid Game           |              |
| 9 | DMX                  |              |

In [47]:



```
keywords = pytrends.suggestions(keyword = 'modi')  
df = pd.DataFrame(keywords)  
df.drop(columns = 'mid')
```

Out[47]:

|   | title                | type                    |
|---|----------------------|-------------------------|
| 0 | Narendra Modi        | Prime Minister of India |
| 1 | SpiceJet             | Airline                 |
| 2 | Brave                | 2012 film               |
| 3 | Modi                 | Taiwanese entertainer   |
| 4 | Grammatical modifier | Topic                   |

In [48]:



```
pytrends.build_payload(kw_list = ['jobs'])
```

In [49]:



```
job_query = pytrends.related_queries()
```

In [50]:



job\_query

Out[50]:

```
{'jobs': {'top':
0      jobs near me      100
1      job                85
2      indeed jobs      75
3      indeed            75
4      part time jobs    45
5      city jobs         37
6      jobs hiring       35
7      online jobs       33
8      government jobs    27
9      amazon jobs       26
10     jobs from home     23
11     best jobs          23
12     steve jobs         21
13     craigslist jobs    19
14     nhs jobs           19
15     google jobs        19
16     govt jobs          17
17     work from home jobs 17
18     it jobs            17
19     work from home     16
20     jobs near me hiring 15
21     hiring near me     15
22     facebook jobs      13
23     security jobs      13
24     usa jobs           13,
'rising':
0      amazon jobs near me 3200
1      work from home jobs near me 2050
2      admin or office jobs 1900
3      indeed jobs near me 1450
4      jobs bg vxod 1450
5      trac jobs 1150
6      warehouse jobs near me 1150
7      part time jobs near me 1100
8      driving jobs near me 1050
9      receptionist jobs near me 1050
10     jobs near me 1000
11     full time jobs near me 1000
12     retail jobs near me 950
13     office jobs near me 850
14     construction jobs near me 800
15     hiring near me 800
16     jobs near me hiring 800
17     cna jobs near me 750
18     remote jobs 600
19     upwork 500
20     amazon warehouse jobs 400
21     ziprecruiter 350
22     amazon jobs 250
23     amazon careers 200
24     fema jobs 200}}}
```

In [51]:



```
job_topic = pytrends.related_topics()
```



```
job_topic.values()
```

Out[53]:

| dict_values([{'rising': |   |                             | value formattedValue                           |
|-------------------------|---|-----------------------------|--|
| link \                  |   |                             |  |
| 0                       | 190   | +190%                       | /trends/explore?q=/m/04pymq&date=today+5-y     |
| 1                       | 110   | +110%                       | /trends/explore?q=/m/014xsg&date=today+5-y     |
| 2                       | 80  | +80%                        | /trends/explore?q=/m/04ctxd&date=today+5-y     |
| 3                       | 70  | +70%                        | /trends/explore?q=/m/05xxpw&date=today+5-y     |
| 4                       | 60  | +60%                        | /trends/explore?q=/m/0t53np8&date=today+5-y    |
| 5                       | 60  | +60%                        | /trends/explore?q=/m/018j6p&date=today+5-y     |
| 6                       | 60  | +60%                        | /trends/explore?q=/m/09ylwk&date=today+5-y     |
| 7                       | 50  | +50%                        | /trends/explore?q=/g/1q6jdznr&date=today+5-y   |
| 8                       | 40  | +40%                        | /trends/explore?q=/g/11h7hz8ms4&date=today+5-y |
| 9                       | 40  | +40%                        | /trends/explore?q=/m/02nzw0&date=today+5-y     |
| 10                      | 40  | +40%                        | /trends/explore?q=/m/02w88k&date=today+5-y     |
| 11                      | 40  | +40%                        | /trends/explore?q=/m/02g0j0&date=today+5-y     |
|                         |   |                             |  |
|                         | topic_mid                                   | topic_title                 | topic_type                                     |
| 0                       | /m/04pymq                                   | .jobs                       | Top-level domain                               |
| 1                       | /m/014xsg                                   | Remote work                 | Topic  |
| 2                       | /m/04ctxd                                   | Commercial driver's license | Topic  |
| 3                       | /m/05xxpw                                   | Full-time job               | Topic  |
| 4                       | /m/0t53np8                                  | Glassdoor                   | Website  |
| 5                       | /m/018j6p                                   | Software Developer          | Occupation                                     |
| 6                       | /m/09ylwk                                   | Indeed                      | Website  |
| 7                       | /g/1q6jdznr                                 | driver                      | Topic  |
| 8                       | /g/11h7hz8ms4                               | Registered nurse            | Occupation                                     |
| 9                       | /m/02nzw0                                   | Warehouse                   | Building use                                   |
| 10                      | /m/02w88k                                   | Salary                      | Topic  |
| 11                      | /m/02g0j0                                   | Freelancer                  | Topic  |
| , 'top':                |   |                             |  |
| value formattedValue    | hasData                                     | \                           |  |
| 0                       | 100   | 100                         | True   |
| 1                       | 6   | 6                           | True   |
| 2                       | 4   | 4                           | True   |
| 3                       | 4   | 4                           | True   |
| 4                       | 4   | 4                           | True   |
| 5                       | 3   | 3                           | True   |
| 6                       | 3   | 3                           | True   |
| 7                       | 2   | 2                           | True   |
| 8                       | 2   | 2                           | True   |
| 9                       | 2   | 2                           | True   |
| 10                      | 2   | 2                           | True   |
| 11                      | 2   | 2                           | True   |
| 12                      | 1   | 1                           | True   |
| 13                      | 1   | 1                           | True   |
| 14                      | 1   | 1                           | True   |
| 15                      | 1   | 1                           | True   |
| 16                      | 1   | 1                           | True   |
| 17                      | 1   | 1                           | True   |
| 18                      | 1   | 1                           | True   |
| 19                      | 0   | <1                          | True   |
| 20                      | 0   | <1                          | True   |
| 21                      | 0   | <1                          | True   |
|                         |   |                             |  |
|                         | link  | topic_mid                   | \  |
| 0                       | /trends/explore?q=/m/04115t2&date=today+5-y | /m/04115t2                  |  |

```

1      /trends/explore?q=/m/09ylwk&date=today+5-y      /m/09ylwk
2      /trends/explore?q=/m/05xxpj&date=today+5-y      /m/05xxpj
3      /trends/explore?q=/m/03nw7w&date=today+5-y      /m/03nw7w
4      /trends/explore?q=/m/036nz&date=today+5-y      /m/036nz
5      /trends/explore?q=/m/03ml62y&date=today+5-y      /m/03ml62y
6      /trends/explore?q=/m/02w88k&date=today+5-y      /m/02w88k
7      /trends/explore?q=/m/014xsg&date=today+5-y      /m/014xsg
8      /trends/explore?q=/m/06y3r&date=today+5-y      /m/06y3r
9      /trends/explore?q=/m/02ky346&date=today+5-y      /m/02ky346
10     /trends/explore?q=/m/01fw9h&date=today+5-y      /m/01fw9h
11     /trends/explore?q=/m/01_942&date=today+5-y      /m/01_942
12     /trends/explore?q=/m/019v9k&date=today+5-y      /m/019v9k
13     /trends/explore?q=/g/11h7hz8ms4&date=today+5-y  /g/11h7hz8ms4
14     /trends/explore?q=/m/02nzw0&date=today+5-y      /m/02nzw0
15     /trends/explore?q=/m/04pymq&date=today+5-y      /m/04pymq
16     /trends/explore?q=/g/1q6jdznr&date=today+5-y    /g/1q6jdznr
17     /trends/explore?q=/m/018j6p&date=today+5-y      /m/018j6p
18     /trends/explore?q=/m/05xxpw&date=today+5-y      /m/05xxpw
19     /trends/explore?q=/m/02g0j0&date=today+5-y      /m/02g0j0
20     /trends/explore?q=/m/0t53np8&date=today+5-y     /m/0t53np8
21     /trends/explore?q=/m/04ctxd&date=today+5-y     /m/04ctxd

```

|    | topic_title                 | topic_type            |
|----|-----------------------------|-----------------------|
| 0  | Job                         | Topic                 |
| 1  | Indeed                      | Website               |
| 2  | Part-time job               | Topic                 |
| 3  | Recruitment                 | Topic                 |
| 4  | Government                  | Organization type     |
| 5  | Career                      | Topic                 |
| 6  | Salary                      | Topic                 |
| 7  | Remote work                 | Topic                 |
| 8  | Steve Jobs                  | American entrepreneur |
| 9  | Engineering                 | Discipline            |
| 10 | National Health Service     | England               |
| 11 | Wage                        | Topic                 |
| 12 | Bachelor's degree           | Degree                |
| 13 | Registered nurse            | Occupation            |
| 14 | Warehouse                   | Building use          |
| 15 | .jobs                       | Top-level domain      |
| 16 | driver                      | Topic                 |
| 17 | Software Developer          | Occupation            |
| 18 | Full-time job               | Topic                 |
| 19 | Freelancer                  | Topic                 |
| 20 | Glassdoor                   | Website               |
| 21 | Commercial driver's license | Topic }])             |