```
In [1]:
          import pandas as pd
          import numpy as np
          import seaborn as sns
          import datetime as dt
          from matplotlib import pyplot as plt
          import datetime
          from datetime import date
In [2]:
          df = pd.read_csv("C:/Users/lalit/Downloads/covid_19_india.csv")
          df
Out[2]:
                 Sno
                       Date Time
                                    State/UnionTerritory ConfirmedIndianNational ConfirmedForeignNational
                      2020-
                              6:00
             0
                                                 Kerala
                                                                               1
                                                                                                         0
                      01-30
                               PM
                              6:00
                      2020-
                                                 Kerala
                                                                               1
                                                                                                         0
                      01-31
                               PM
                      2020-
                              6:00
             2
                                                                               2
                                                 Kerala
                                                                                                         0
                      02-01
                               PM
                      2020-
                              6:00
             3
                                                 Kerala
                                                                               3
                                                                                                         0
                      02-02
                               PM
                      2020-
                              6:00
                                                 Kerala
                                                                               3
                                                                                                         0
                      02-03
                               PM
                      2020-
                              8:00
          4246
               4247
                                                 Tripura
                      07-18
                               AM
                      2020-
                              8:00
          4247
                4248
                                            Uttarakhand
                      07-18
                               AM
                      2020-
                              8:00
          4248
                4249
                                           Uttar Pradesh
                      07-18
                              AM
                              8:00
                      2020-
          4249
                4250
                                            West Bengal
                      07-18
                               AM
                              8:00
                      2020-
                                            Cases being
          4250
                4251
                      07-18
                                      reassigned to states
                               AM
         4251 rows × 9 columns
In [3]:
          df1 = df.dropna()
In [4]:
          df1
Out[4]:
                 Sno
                                   State/UnionTerritory ConfirmedIndianNational ConfirmedForeignNational
                       Date Time
                      2020-
                              6:00
             0
                                                 Kerala
                                                                               1
                                                                                                         0
                      01-30
                               PM
                              6:00
                      2020-
                                                                                                         0
             1
                                                 Kerala
                                                                               1
                      01-31
                               PM
```

		3110	Date	IIIIe	,		Commineuroreignivational
	2	3	2020- 02-01	6:00 PM	Kerala	2	0
	3	4	2020- 02-02	6:00 PM	Kerala	3	0
	4	5	2020- 02-03	6:00 PM	Kerala	3	0
	•••						
	4246	4247	2020- 07-18	8:00 AM	Tripura	-	-
	4247	4248	2020- 07-18	8:00 AM	Uttarakhand	-	-
	4248	4249	2020- 07-18	8:00 AM	Uttar Pradesh	-	-
	4249	4250	2020- 07-18	8:00 AM	West Bengal	-	-
	4250	4251	2020- 07-18	8:00 AM	Cases being reassigned to states	-	-
	4251 r	ows ×	9 colum	ıns			
	4						
In [5]:	df1.	head()				
			,				
Out[5]:	Sn				te/UnionTerritory Cor	nfirmedIndianNational Co	nfirmedForeignNational Cur
Out[5]:	0 0	1 202 01-	20- 6:00)	te/UnionTerritory Con	nfirmedIndianNational Co	nfirmedForeignNational Cur 0
Out[5]:		202	20- 6:00 -30 PN 20- 6:00) 1			
Out[5]:	0	1 202 01-	20- 6:00 30 PM 20- 6:00 31 PM) 1) 1	Kerala	1	0
Out[5]:	0	1 202 01- 2 202 01-	20- 6:00 30 PM 20- 6:00 31 PM 20- 6:00 01 PM) 1) 1 1	Kerala Kerala	1	0
Out[5]:	0 1 2	1 202 01- 2 202 01- 3 202 02-	20- 6:00 30 PM 20- 6:00 31 PM 20- 6:00 01 PM 20- 6:00 02 PM 20- 6:00) 1 1 1 1 1	Kerala Kerala Kerala	1 1 2	0 0
Out[5]:	0 1 2 3	1 202 01- 2 202 01- 3 202 02- 4 202 02- 5 202	20- 6:00 30 PM 20- 6:00 31 PM 20- 6:00 01 PM 20- 6:00 02 PM 20- 6:00) 1 1 1 1 1	Kerala Kerala Kerala Kerala	1 1 2 3	0 0 0
Out[5]:	0 1 2 3 4 4 df1	1 202 01- 2 202 01- 3 202 4 202 02- 5 202 02- = df1	20- 6:00 30 PM 20- 6:00 31 PM 20- 6:00 01 PM 20- 6:00 02 PM 20- 6:00 03 PM) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Kerala Kerala Kerala Kerala Kerala Kerala	1 1 2 3	0 0 0 0 0 0
	0 1 2 3 4 df1 df1.	1 202 01- 2 202 01- 3 202 4 202 02- 5 202 02- = df1	20- 6:00 30 PM 20- 6:00 31 PM 20- 6:00 01 PM 20- 6:00 02 PM 20- 6:00 03 PM [["Date ns = ["d) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Kerala Kerala Kerala Kerala Kerala Kerala	1	0 0 0 0 0 0
In [6]:	0 1 2 3 4 df1 df1.	1 202 01- 2 201- 3 202- 4 202- 5 202- 5 202- = df1 colum	20- 6:00 30 PM 20- 6:00 31 PM 20- 6:00 01 PM 20- 6:00 02 PM 20- 6:00 03 PM [["Date ns = [") 1 1 1 1 1 1 1 1 1 date	Kerala Kerala Kerala Kerala Kerala Kerala	1 2 3 3 y", "Cured", "Deaths", "deaths", "confirmed	0 0 0 0 0 0
In [6]:	0 1 2 3 4 df1 df1.	1 202 01- 2 202 01- 3 202- 4 202- 5 202- 5 202- = df1 colum	20- 6:00 30 PM 20- 6:00 31 PM 20- 6:00 01 PM 20- 6:00 02 PM 20- 6:00 03 PM [["Date ns = [") 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Kerala Kerala Kerala Kerala Kerala tate/UnionTerritor , "state", "cured"	1 2 3 3 y", "Cured", "Deaths", "deaths", "confirmed	0 0 0 0 0 0

Sno Date Time State/UnionTerritory ConfirmedIndianNational ConfirmedForeignNational

	date	state	cured	deaths	confirmed
2	2020-02-01	Kerala	0	0	2
3	2020-02-02	Kerala	0	0	3
4	2020-02-03	Kerala	0	0	3

In [8]:

df1.tail()

Out[8]:

	confirme	deaths	cured	state	date	
5	236	3	1684	Tripura	2020-07-18	4246
2	410	51	3021	Uttarakhand	2020-07-18	4247
3	4516	1084	27634	Uttar Pradesh	2020-07-18	4248
1	3801	1049	22253	West Bengal	2020-07-18	4249
3	16	0	0	Cases being reassigned to states	2020-07-18	4250

In [9]:

today = df1[df1.date == '2020-07-15']

In [10]: | today

O	[10]	
UHIT	пи	
000	1 - 0 1	

date	state	cured	deaths	confirmed
2020-07-15	Andaman and Nicobar Islands	109	0	166
2020-07-15	Andhra Pradesh	17467	408	33019
2020-07-15	Arunachal Pradesh	153	3	462
2020-07-15	Assam	11416	40	17807
2020-07-15	Bihar	12849	174	19284
2020-07-15	Chandigarh	446	10	600
2020-07-15	Chhattisgarh	3275	20	4379
2020-07-15	Dadra and Nagar Haveli and Daman and Diu	310	1	520
2020-07-15	Delhi	93236	3446	115346
2020-07-15	Goa	1607	18	2753
2020-07-15	Gujarat	30503	2069	43637
2020-07-15	Haryana	17090	312	22628
2020-07-15	Himachal Pradesh	951	11	1309
2020-07-15	Jammu and Kashmir	6223	195	11173
2020-07-15	Jharkhand	2427	36	4091
2020-07-15	Karnataka	17390	842	44077
2020-07-15	Kerala	4438	34	8930
2020-07-15	Ladakh	946	1	1093
2020-07-15	Madhya Pradesh	13575	673	19005
	2020-07-15 2020-07-15 2020-07-15 2020-07-15 2020-07-15 2020-07-15 2020-07-15 2020-07-15 2020-07-15 2020-07-15 2020-07-15 2020-07-15 2020-07-15 2020-07-15 2020-07-15 2020-07-15	2020-07-15 Andaman and Nicobar Islands 2020-07-15 Andhra Pradesh 2020-07-15 Arunachal Pradesh 2020-07-15 Assam 2020-07-15 Bihar 2020-07-15 Chandigarh 2020-07-15 Chhattisgarh 2020-07-15 Dadra and Nagar Haveli and Daman and Diu 2020-07-15 Goa 2020-07-15 Goa 2020-07-15 Haryana 2020-07-15 Himachal Pradesh 2020-07-15 Jammu and Kashmir 2020-07-15 Jharkhand 2020-07-15 Karnataka 2020-07-15 Kerala 2020-07-15 Ladakh	2020-07-15 Andaman and Nicobar Islands 109 2020-07-15 Andhra Pradesh 17467 2020-07-15 Arunachal Pradesh 153 2020-07-15 Assam 11416 2020-07-15 Bihar 12849 2020-07-15 Chandigarh 446 2020-07-15 Chhattisgarh 3275 2020-07-15 Dadra and Nagar Haveli and Daman and Diu 310 2020-07-15 Delhi 93236 2020-07-15 Goa 1607 2020-07-15 Gujarat 30503 2020-07-15 Himachal Pradesh 951 2020-07-15 Jammu and Kashmir 6223 2020-07-15 Karnataka 17390 2020-07-15 Kerala 4438 2020-07-15 Kerala 4438 2020-07-15 Ladakh 946	2020-07-15 Andaman and Nicobar Islands 109 0 2020-07-15 Andhra Pradesh 17467 408 2020-07-15 Arunachal Pradesh 153 3 2020-07-15 Assam 11416 40 2020-07-15 Bihar 12849 174 2020-07-15 Chandigarh 446 10 2020-07-15 Chhattisgarh 3275 20 2020-07-15 Dadra and Nagar Haveli and Daman and Diu 310 1 2020-07-15 Goa 1607 18 2020-07-15 Gujarat 30503 2069 2020-07-15 Haryana 17090 312 2020-07-15 Jammu and Kashmir 6223 195 2020-07-15 Jharkhand 2427 36 2020-07-15 Karnataka 17390 842 2020-07-15 Kerala 4438 34 2020-07-15 Ladakh 946 1

	date	state	cured	deaths	confirmed
4126	2020-07-15	Maharashtra	149007	10695	267665
4127	2020-07-15	Manipur	970	0	1672
4128	2020-07-15	Meghalaya	66	2	318
4129	2020-07-15	Mizoram	159	0	238
4130	2020-07-15	Nagaland	346	0	896
4131	2020-07-15	Odisha	9864	74	14280
4132	2020-07-15	Puducherry	829	18	1531
4133	2020-07-15	Punjab	5663	213	8511
4134	2020-07-15	Rajasthan	19161	525	25571
4135	2020-07-15	Sikkim	87	0	209
4136	2020-07-15	Tamil Nadu	97310	2099	147324
4137	2020-07-15	Telangana	24840	375	37745
4138	2020-07-15	Tripura	1538	2	2170
4139	2020-07-15	Uttarakhand	2867	50	3686
4140	2020-07-15	Uttar Pradesh	24983	983	39724
4141	2020-07-15	West Bengal	19931	980	32838
4142	2020-07-15	Cases being reassigned to states	0	0	1524

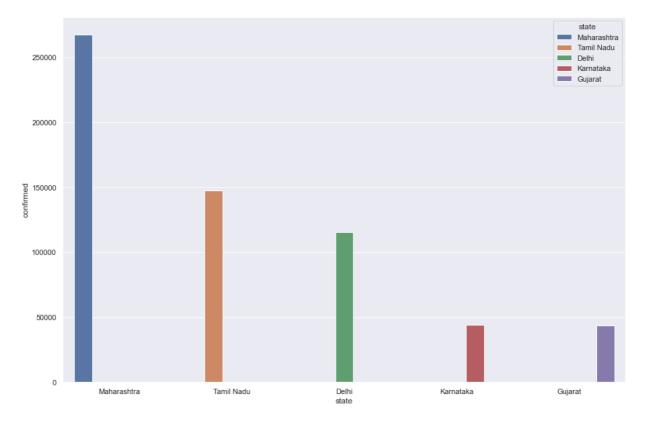
In [11]: # sorting data wrt number of confirmed cases
 max_confirmed_cases = today.sort_values(by = "confirmed", ascending = False)
 max_confirmed_cases

Out[11]:		date	state	cured	deaths	confirmed
	4126	2020-07-15	Maharashtra	149007	10695	267665
	4136	2020-07-15	Tamil Nadu	97310	2099	147324
	4115	2020-07-15	Delhi	93236	3446	115346
	4122	2020-07-15	Karnataka	17390	842	44077
	4117	2020-07-15	Gujarat	30503	2069	43637
	4140	2020-07-15	Uttar Pradesh	24983	983	39724
	4137	2020-07-15	Telangana	24840	375	37745
	4108	2020-07-15	Andhra Pradesh	17467	408	33019
	4141	2020-07-15	West Bengal	19931	980	32838
	4134	2020-07-15	Rajasthan	19161	525	25571
	4118	2020-07-15	Haryana	17090	312	22628
	4111	2020-07-15	Bihar	12849	174	19284
	4125	2020-07-15	Madhya Pradesh	13575	673	19005
	4110	2020-07-15	Assam	11416	40	17807

	date	state	cured	deaths	confirmed
4131	2020-07-15	Odisha	9864	74	14280
4120	2020-07-15	Jammu and Kashmir	6223	195	11173
4123	2020-07-15	Kerala	4438	34	8930
4133	2020-07-15	Punjab	5663	213	8511
4113	2020-07-15	Chhattisgarh	3275	20	4379
4121	2020-07-15	Jharkhand	2427	36	4091
4139	2020-07-15	Uttarakhand	2867	50	3686
4116	2020-07-15	Goa	1607	18	2753
4138	2020-07-15	Tripura	1538	2	2170
4127	2020-07-15	Manipur	970	0	1672
4132	2020-07-15	Puducherry	829	18	1531
4142	2020-07-15	Cases being reassigned to states	0	0	1524
4119	2020-07-15	Himachal Pradesh	951	11	1309
4124	2020-07-15	Ladakh	946	1	1093
4130	2020-07-15	Nagaland	346	0	896
4112	2020-07-15	Chandigarh	446	10	600
4114	2020-07-15	Dadra and Nagar Haveli and Daman and Diu	310	1	520
4109	2020-07-15	Arunachal Pradesh	153	3	462
4128	2020-07-15	Meghalaya	66	2	318
4129	2020-07-15	Mizoram	159	0	238
4135	2020-07-15	Sikkim	87	0	209
4107	2020-07-15	Andaman and Nicobar Islands	109	0	166

```
In [12]: #Getting states with maximum number of confirmed cases
top_states_confirmed = max_confirmed_cases[0:5]
```

```
In [13]:
    sns.set(rc={"figure.figsize":(15,10)})
    sns.barplot(x = "state", y="confirmed", data=top_states_confirmed, hue="state")
    plt.show()
```



In [14]:
#Sorting data wrt number of death cases
max_death_cases = today.sort_values(by = "deaths", ascending = False)
max_death_cases

Out[14]:		date	state	cured	deaths	confirmed
	4126	2020-07-15	Maharashtra	149007	10695	267665
	4115	2020-07-15	Delhi	93236	3446	115346
	4136	2020-07-15	Tamil Nadu	97310	2099	147324
	4117	2020-07-15	Gujarat	30503	2069	43637
	4140	2020-07-15	Uttar Pradesh	24983	983	39724
	4141	2020-07-15	West Bengal	19931	980	32838
	4122	2020-07-15	Karnataka	17390	842	44077
	4125	2020-07-15	Madhya Pradesh	13575	673	19005
	4134	2020-07-15	Rajasthan	19161	525	25571
	4108	2020-07-15	Andhra Pradesh	17467	408	33019
	4137	2020-07-15	Telangana	24840	375	37745
	4118	2020-07-15	Haryana	17090	312	22628
	4133	2020-07-15	Punjab	5663	213	8511
	4120	2020-07-15	Jammu and Kashmir	6223	195	11173
	4111	2020-07-15	Bihar	12849	174	19284
	4131	2020-07-15	Odisha	9864	74	14280
	4139	2020-07-15	Uttarakhand	2867	50	3686
	4110	2020-07-15	Assam	11416	40	17807

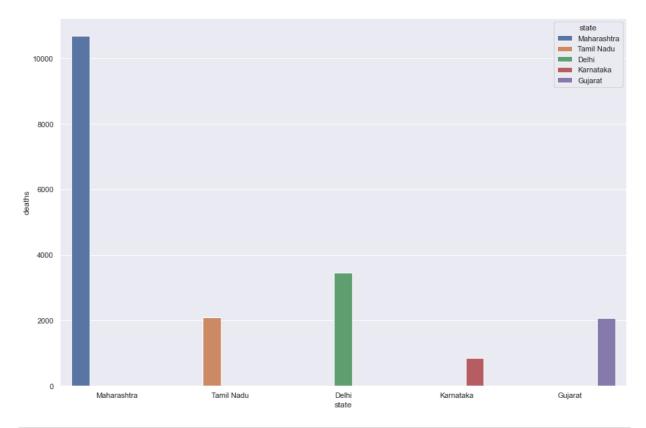
	date	54440	carca	acatiis	committee
4121	2020-07-15	Jharkhand	2427	36	4091
4123	2020-07-15	Kerala	4438	34	8930
4113	2020-07-15	Chhattisgarh	3275	20	4379
4116	2020-07-15	Goa	1607	18	2753
4132	2020-07-15	Puducherry	829	18	1531
4119	2020-07-15	Himachal Pradesh	951	11	1309
4112	2020-07-15	Chandigarh	446	10	600
4109	2020-07-15	Arunachal Pradesh	153	3	462
4128	2020-07-15	Meghalaya	66	2	318
4138	2020-07-15	Tripura	1538	2	2170
4124	2020-07-15	Ladakh	946	1	1093
4114	2020-07-15	Dadra and Nagar Haveli and Daman and Diu	310	1	520
4107	2020-07-15	Andaman and Nicobar Islands	109	0	166
4135	2020-07-15	Sikkim	87	0	209
4130	2020-07-15	Nagaland	346	0	896
4129	2020-07-15	Mizoram	159	0	238
4127	2020-07-15	Manipur	970	0	1672
4142	2020-07-15	Cases being reassigned to states	0	0	1524

state cured deaths confirmed

date

```
In [15]: #States with maximum numbert of death cases
top_states_death = max_death_cases[0:5]
```

```
In [16]:
    sns.set(rc={"figure.figsize":(15,10)})
    sns.barplot(x = "state", y="deaths", data=top_states_confirmed, hue="state")
    plt.show()
```



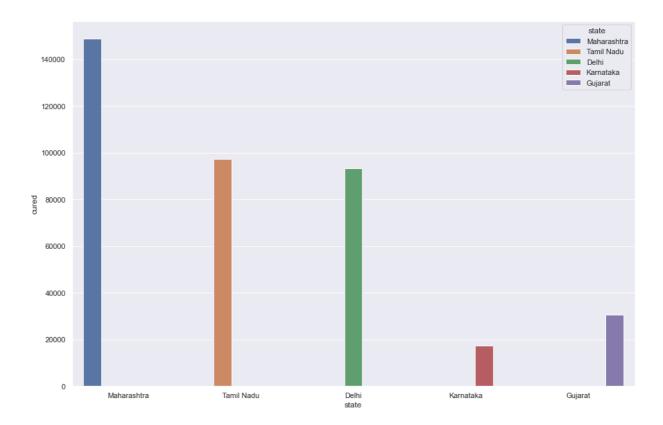
Sorting data wrt number of curved cases
max_cured_cases = today.sort_values(by = "cured", ascending=False)
max_cured_cases

Out[17]:		date	state	cured	deaths	confirmed
	4126	2020-07-15	Maharashtra	149007	10695	267665
	4136	2020-07-15	Tamil Nadu	97310	2099	147324
	4115	2020-07-15	Delhi	93236	3446	115346
	4117	2020-07-15	Gujarat	30503	2069	43637
	4140	2020-07-15	Uttar Pradesh	24983	983	39724
	4137	2020-07-15	Telangana	24840	375	37745
	4141	2020-07-15	West Bengal	19931	980	32838
	4134	2020-07-15	Rajasthan	19161	525	25571
	4108	2020-07-15	Andhra Pradesh	17467	408	33019
	4122	2020-07-15	Karnataka	17390	842	44077
	4118	2020-07-15	Haryana	17090	312	22628
	4125	2020-07-15	Madhya Pradesh	13575	673	19005
	4111	2020-07-15	Bihar	12849	174	19284
	4110	2020-07-15	Assam	11416	40	17807
	4131	2020-07-15	Odisha	9864	74	14280
	4120	2020-07-15	Jammu and Kashmir	6223	195	11173
	4133	2020-07-15	Punjab	5663	213	8511
	4123	2020-07-15	Kerala	4438	34	8930

confirmed	deaths	cured	state	date	
4379	20	3275	Chhattisgarh	2020-07-15	4113
3686	50	2867	Uttarakhand	2020-07-15	4139
4091	36	2427	Jharkhand	2020-07-15	4121
2753	18	1607	Goa	2020-07-15	4116
2170	2	1538	Tripura	2020-07-15	4138
1672	0	970	Manipur	2020-07-15	4127
1309	11	951	Himachal Pradesh	2020-07-15	4119
1093	1	946	Ladakh	2020-07-15	4124
1531	18	829	Puducherry	2020-07-15	4132
600	10	446	Chandigarh	2020-07-15	4112
896	0	346	Nagaland	2020-07-15	4130
520	1	310	Dadra and Nagar Haveli and Daman and Diu	2020-07-15	4114
238	0	159	Mizoram	2020-07-15	4129
462	3	153	Arunachal Pradesh	2020-07-15	4109
166	0	109	Andaman and Nicobar Islands	2020-07-15	4107
209	0	87	Sikkim	2020-07-15	4135
318	2	66	Meghalaya	2020-07-15	4128
1524	0	0	Cases being reassigned to states	2020-07-15	4142

```
In [18]: # States with maximum no. of cured cases
top_states_cured = max_cured_cases[0:5]
```

```
In [19]:
    sns.set(rc={"figure.figsize":(15,10)})
    sns.barplot(x = "state", y="cured", data=top_states_confirmed, hue="state")
    plt.show()
```



```
In [20]:
          # Maharashtra
```

In [21]: maha = df1[df1.state == "Maharashtra"]

In [22]:

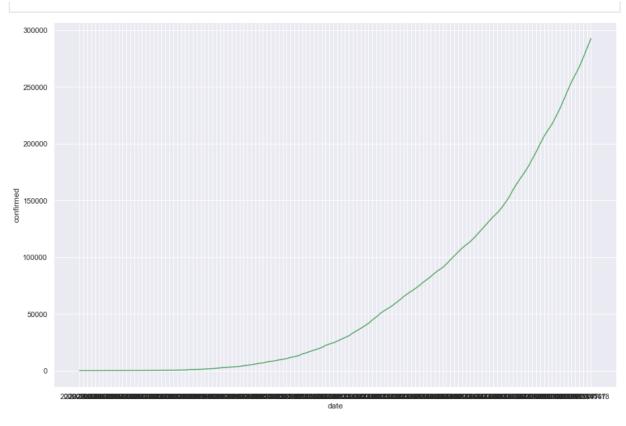
maha

Out	22]	

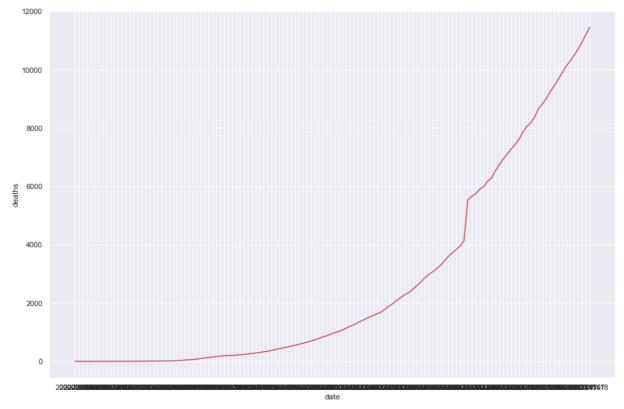
	date	state	cured	deaths	confirmed
76	2020-03-09	Maharashtra	0	0	2
91	2020-03-10	Maharashtra	0	0	5
97	2020-03-11	Maharashtra	0	0	2
120	2020-03-12	Maharashtra	0	0	11
133	2020-03-13	Maharashtra	0	0	14
•••					
4090	2020-07-14	Maharashtra	144507	10482	260924
4126	2020-07-15	Maharashtra	149007	10695	267665
4162	2020-07-16	Maharashtra	152613	10928	275640
4198	2020-07-17	Maharashtra	158140	11194	284281
4234	2020-07-18	Maharashtra	160357	11452	292589

132 rows × 5 columns

```
In [23]:
          # Confirmed cases in maharashtra
          sns.set(rc={"figure.figsize":(15,10)})
          sns.lineplot(x = "date", y="confirmed", data=maha, color="g")
          plt.show()
```



```
In [24]:
# Deaths cases in maharashtra
sns.set(rc={"figure.figsize":(15,10)})
sns.lineplot(x = "date", y="deaths", data=maha, color="r")
plt.show()
```



```
In [25]: # Kerala
```

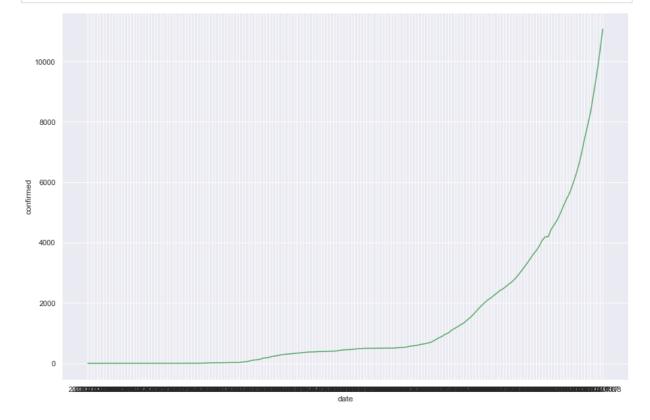
```
In [26]: kerala = df1[df1.state == "Kerala"]
```

In [27]: kerala

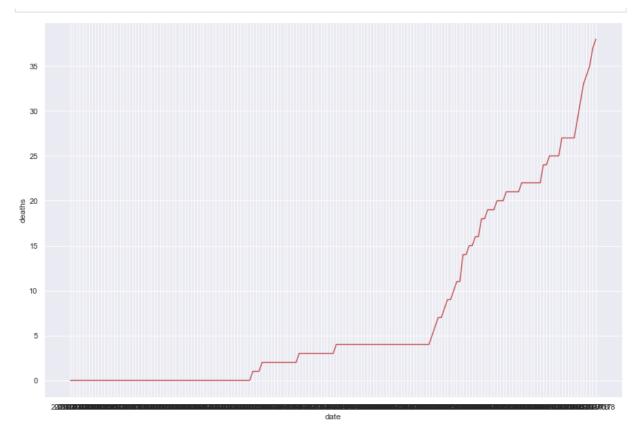
Out[27]:		date	state	cured	deaths	confirmed
	0	2020-01-30	Kerala	0	0	1
	1	2020-01-31	Kerala	0	0	1
	2	2020-02-01	Kerala	0	0	2
	3	2020-02-02	Kerala	0	0	3
	4	2020-02-03	Kerala	0	0	3
	•••					
	4087	2020-07-14	Kerala	4257	33	8322
	4123	2020-07-15	Kerala	4438	34	8930
	4159	2020-07-16	Kerala	4634	35	9553
	4195	2020-07-17	Kerala	4862	37	10275
	4231	2020-07-18	Kerala	4995	38	11066

171 rows × 5 columns

```
In [28]: # Confirmed cases in kerala
sns.set(rc={"figure.figsize":(15,10)})
sns.lineplot(x = "date", y="confirmed", data=kerala, color="g")
plt.show()
```



```
In [29]:
# Deaths cases in kerala
sns.set(rc={"figure.figsize":(15,10)})
sns.lineplot(x = "date", y="deaths", data=kerala, color="r")
plt.show()
```



```
In [30]: # Jammu and Kashmir
```

In [31]: jk = df1[df1.state == "Jammu and Kashmir"]

In [32]: jk

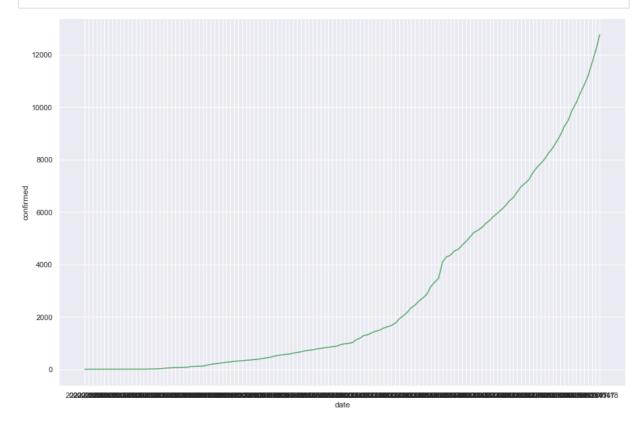
	date	state	cured	deaths	confirmed
81	2020-03-09	Jammu and Kashmir	0	0	1
96	2020-03-10	Jammu and Kashmir	0	0	1
106	2020-03-11	Jammu and Kashmir	0	0	1
117	2020-03-12	Jammu and Kashmir	0	0	1
130	2020-03-13	Jammu and Kashmir	0	0	1
•••					
4084	2020-07-14	Jammu and Kashmir	6095	187	10827
4120	2020-07-15	Jammu and Kashmir	6223	195	11173
4156	2020-07-16	Jammu and Kashmir	6337	206	11666
4192	2020-07-17	Jammu and Kashmir	6446	222	12156
4228	2020-07-18	Jammu and Kashmir	6558	231	12757

132 rows × 5 columns

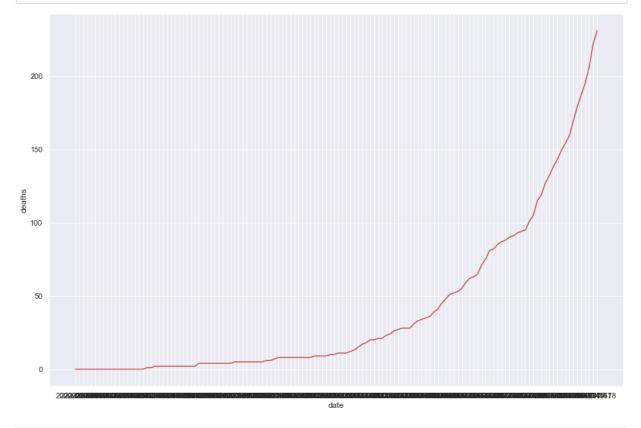
Out[32]:

```
In [33]: # Confirmed cases in jk
sns.set(rc={"figure.figsize":(15,10)})
```

```
sns.lineplot(x = "date", y="confirmed", data=jk, color="g")
plt.show()
```



```
# Deaths cases in jk
sns.set(rc={"figure.figsize":(15,10)})
sns.lineplot(x = "date", y="deaths", data=jk, color="r")
plt.show()
```



```
In [35]: # Checking state wise testigng details
    tests = pd.read_csv("C:/Users/lalit/Downloads/StatewiseTestingDetails.csv")
    tests
```

Out[35]:		Date	State	TotalSamples	Negative	Positive
	0	2020-04-17	Andaman and Nicobar Islands	1403.0	1210	12.0
	1	2020-04-24	Andaman and Nicobar Islands	2679.0	NaN	27.0
	2	2020-04-27	Andaman and Nicobar Islands	2848.0	NaN	33.0
	3	2020-05-01	Andaman and Nicobar Islands	3754.0	NaN	33.0
	4	2020-05-16	Andaman and Nicobar Islands	6677.0	NaN	33.0
	•••					
	16331	2021-08-06	West Bengal	15999961.0	NaN	NaN
	16332	2021-08-07	West Bengal	16045662.0	NaN	NaN
	16333	2021-08-08	West Bengal	16092192.0	NaN	NaN
	16334	2021-08-09	West Bengal	16122345.0	NaN	NaN
	16335	2021-08-10	West Bengal	16162814.0	NaN	NaN
	16336 r	ows × 5 colu	umns			

In [36]: test_latest = tests[tests.Date == "2020-07-15"]

In [37]: test_latest

Out[37]:		Date	State	TotalSamples	Negative	Positive
,	62	2020-07-15	Andaman and Nicobar Islands	19061.0	NaN	176.0
	549	2020-07-15	Andhra Pradesh	1217963.0	1182512	35451.0
	1027	2020-07-15	Arunachal Pradesh	34619.0	32450	491.0
	1495	2020-07-15	Assam	589202.0	NaN	18666.0
	1984	2020-07-15	Bihar	337212.0	NaN	20173.0
	2472	2020-07-15	Chandigarh	10050.0	9385	619.0
	2945	2020-07-15	Chhattisgarh	222113.0	NaN	4556.0
	3415	2020-07-15	Dadra and Nagar Haveli and Daman and Diu	37392.0	36195	552.0
	3604	2020-07-15	Delhi	736436.0	NaN	116993.0
	4087	2020-07-15	Goa	99234.0	NaN	2951.0
	4576	2020-07-15	Gujarat	487707.0	443059	44648.0
	5066	2020-07-15	Haryana	400155.0	371350	23306.0
	5554	2020-07-15	Himachal Pradesh	105734.0	103730	1341.0
	6043	2020-07-15	Jammu and Kashmir	474149.0	462483	11666.0
	6528	2020-07-15	Jharkhand	196070.0	191508	4562.0
	7019	2020-07-15	Karnataka	902026.0	831246	47253.0
	7515	2020-07-15	Kerala	453716.0	NaN	9554.0

	Date	State	TotalSamples	Negative	Positive
8496	2020-07-15	Madhya Pradesh	540483.0	516780	19643.0
8987	2020-07-15	Maharashtra	1413185.0	1132434	280751.0
9429	2020-07-15	Manipur	65866.0	NaN	1700.0
9853	2020-07-15	Meghalaya	24942.0	NaN	346.0
10284	2020-07-15	Mizoram	17168.0	NaN	238.0
10750	2020-07-15	Nagaland	27421.0	NaN	902.0
11240	2020-07-15	Odisha	353824.0	NaN	14898.0
11719	2020-07-15	Puducherry	27916.0	25907	1596.0
12209	2020-07-15	Punjab	421593.0	NaN	8799.0
12700	2020-07-15	Rajasthan	1123902.0	1091930	26437.0
13161	2020-07-15	Sikkim	13352.0	11355	NaN
13604	2020-07-15	Tamil Nadu	1736747.0	NaN	151820.0
14028	2020-07-15	Telangana	208666.0	169324	39342.0
14495	2020-07-15	Tripura	92313.0	90032	2281.0
14961	2020-07-15	Uttar Pradesh	1277241.0	NaN	41383.0
15451	2020-07-15	Uttarakhand	102529.0	89212	3785.0
15944	2020-07-15	West Bengal	649928.0	NaN	34427.0

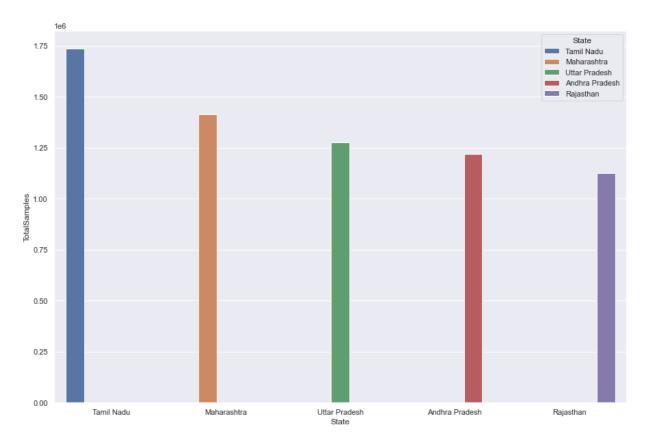
In [38]:

Sorting data wrt number of cured cases
max_tests_State = test_latest.sort_values(by = "TotalSamples", ascending=False) max_tests_State

Out[38]:		Date	State	TotalSamples	Negative	Positive
	13604	2020-07-15	Tamil Nadu	1736747.0	NaN	151820.0
	8987	2020-07-15	Maharashtra	1413185.0	1132434	280751.0
	14961	2020-07-15	Uttar Pradesh	1277241.0	NaN	41383.0
	549	2020-07-15	Andhra Pradesh	1217963.0	1182512	35451.0
	12700	2020-07-15	Rajasthan	1123902.0	1091930	26437.0
	7019	2020-07-15	Karnataka	902026.0	831246	47253.0
	3604	2020-07-15	Delhi	736436.0	NaN	116993.0
	15944	2020-07-15	West Bengal	649928.0	NaN	34427.0
	1495	2020-07-15	Assam	589202.0	NaN	18666.0
	8496	2020-07-15	Madhya Pradesh	540483.0	516780	19643.0
	4576	2020-07-15	Gujarat	487707.0	443059	44648.0
	6043	2020-07-15	Jammu and Kashmir	474149.0	462483	11666.0
	7515	2020-07-15	Kerala	453716.0	NaN	9554.0
	12209	2020-07-15	Punjab	421593.0	NaN	8799.0

	Date	State	TotalSamples	Negative	Positive
5066	2020-07-15	Haryana	400155.0	371350	23306.0
11240	2020-07-15	Odisha	353824.0	NaN	14898.0
1984	2020-07-15	Bihar	337212.0	NaN	20173.0
2945	2020-07-15	Chhattisgarh	222113.0	NaN	4556.0
14028	2020-07-15	Telangana	208666.0	169324	39342.0
6528	2020-07-15	Jharkhand	196070.0	191508	4562.0
5554	2020-07-15	Himachal Pradesh	105734.0	103730	1341.0
15451	2020-07-15	Uttarakhand	102529.0	89212	3785.0
4087	2020-07-15	Goa	99234.0	NaN	2951.0
14495	2020-07-15	Tripura	92313.0	90032	2281.0
9429	2020-07-15	Manipur	65866.0	NaN	1700.0
3415	2020-07-15	Dadra and Nagar Haveli and Daman and Diu	37392.0	36195	552.0
1027	2020-07-15	Arunachal Pradesh	34619.0	32450	491.0
11719	2020-07-15	Puducherry	27916.0	25907	1596.0
10750	2020-07-15	Nagaland	27421.0	NaN	902.0
9853	2020-07-15	Meghalaya	24942.0	NaN	346.0
62	2020-07-15	Andaman and Nicobar Islands	19061.0	NaN	176.0
10284	2020-07-15	Mizoram	17168.0	NaN	238.0
13161	2020-07-15	Sikkim	13352.0	11355	NaN
2472	2020-07-15	Chandigarh	10050.0	9385	619.0

```
In [39]: #Making barplot for states with max test cases
    sns.set(rc={"figure.figsize":(15,10)})
    sns.barplot(x = "State", y="TotalSamples", data=max_tests_State[0:5], hue="State")
    plt.show()
```



In []: