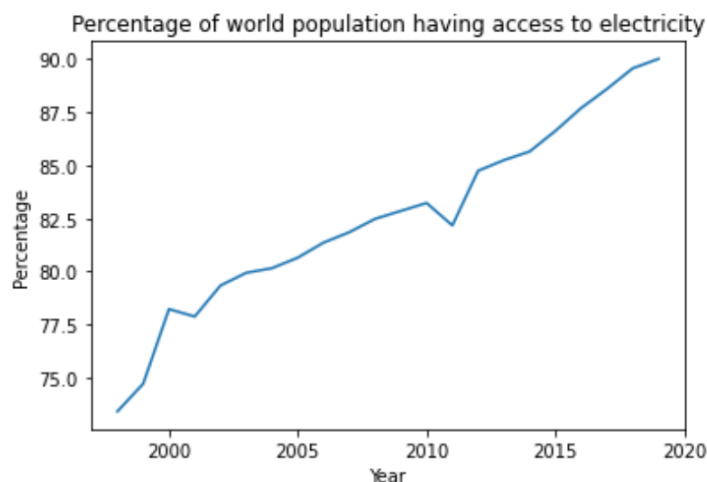


Climate change data analysis based on World Bank data

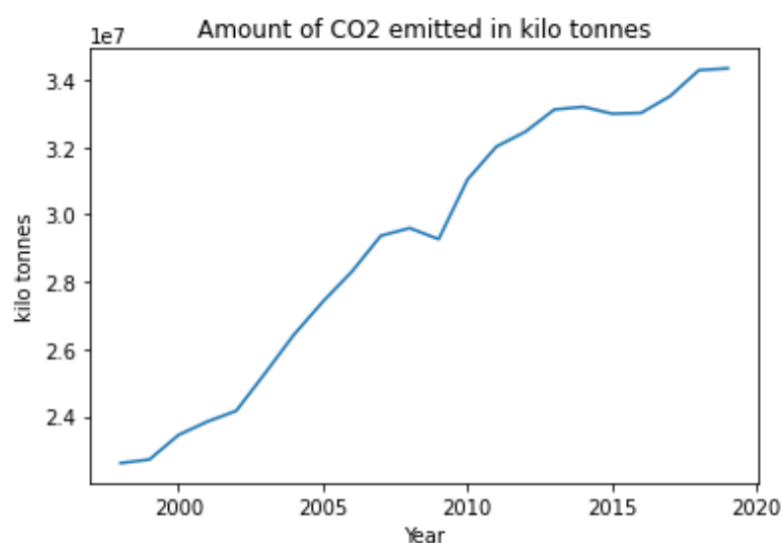
Nearly 40% of electricity generated across the world is thermal electricity which involves burning of carbon products, which degrades climate. 3 decades ago, electricity was not accessible to some parts of the world, but now electricity is accessible to a much large population, which has risen the amount of electricity production and in turn increasing the amount of CO₂ released into the atmosphere and is making the climate worse.

Percentage of world population having access to electricity:



From this plot, we can understand that the world population having access to electricity has increased from 73.4% in 1998 to 90% in 2019.

Amount of CO₂ emission all over the world:



The above plot shows that the amount of CO₂ emitted was 22613709 kilo tones in 1998 and it has increased to 34344006 kilo tones in 2019.

The amount of CO2 emission and percentage of population having access to electricity data from 1998 to 2019:

	Access to electricity	Amount of CO2 emission
1998	73.40649	22613709.035227
1999	74.708477	22720117.592763
2000	78.223955	23445433.273458
2001	77.874941	23845771.44518
2002	79.336577	24165261.257135
2003	79.934784	25285349.244404
2004	80.151751	26434355.260361
2005	80.647987	27414328.022854
2006	81.356284	28302931.656345
2007	81.847577	29368779.202002
2008	82.476164	29595752.397156
2009	82.849047	29267375.18512
2010	83.222541	31043476.982002
2011	82.166583	32021108.256795
2012	84.74071	32460316.859925
2013	85.240416	33119382.990346
2014	85.648321	33198729.820472
2015	86.61952	32995536.020088
2016	87.696899	33018556.39916
2017	88.594052	33514537.911194
2018	89.566532	34289350.660764
2019	90.011785	34344006.072096

Summary Statistics:

The mean value of percentage of world population having access to electricity is: 82.56006326595075.

The mean value of amount of CO2 emitted is: 29202916.61567484.

The standard deviation of the world population data is: 4.477128880655251.

The standard deviation of the CO2 data is: 4099702.1821198547

The correlation between the amount of CO2 emission and the percentage of world population having access to electricity is: 0.9439615842343759.

This high correlation establishes the fact that we should explore other forms of electricity production in order to save our climate.