

## ASSIGNMENT-3

Created By:

Srinidhi Devan

- The **first step** is to **import the necessary libraries** like: 'numpy', 'pandas', 'seaborn' and 'matplotlib'.
- **Next step** is to **read the dataset** given.
  - After downloading the data from 'GapMinder', the file was converted into 'csv' format from 'xlsx' for simplicity purposes.
  - It is observed that the data contains five variables: 'year', 'country', 'pop', 'continent' and 'lifeExp'.
  - Since we, here, only consider three variables: 'year', 'country' and 'lifeExp', we can extract only those variables to proceed to our next step.
- **Third step** is to **create the Pivot Table** with 'year' along the x-axis, 'country' along the y-axis and 'lifeExp' filled within the cells.
  - Index in Python implies y-axis, which in our case is 'country';
  - Columns in Python implies x-axis, which in our case is 'year';
  - Values in Python implies the values for the Pivot Table which here is 'lifeExp';
- **Final step** here is **creating the Heat Map** from the Pivot Table created in the above step.
  - This is done using 'sns.heatmap()' command.
  - The figure size is set as: (20,70).

*To download the Heat Map in 'png' format:*

1. *Import 'savefig' from 'pylab'*
2. *Then 'savefig' command will help us to download the heat map in the required png format.*