**TAKENMING GLOBAL INTERNSHIP ON DATA ANALYTICS**

**ASSIGNMENT 3: PIVOT TABLE AND HEATMAP VISUALIZATION**

**By Ankit Taklikar**

* First I copied the csv data from the link provided and saved the data as a .csv file (data.csv)
* The program starts with importing the essential packages
* The csv file is then read using: df = pd.read\_csv(‘**data.csv’**)

Here the csv file is assigned to dataframe named df

* The pivot\_table command is used to create a pivot table of the data provided.
* We use pivot\_table instead of pivot because the attributes are not unique so we get an error if we use pivot. The year is assigned to x –axes, continent to y axes and lifeExp to be filled within cells. The command is given as:

df2 = df.pivot\_table(index=**'year'**, columns=**'continent'**, values=**'lifeExp'**)

Print df2

* sns.heatmap(df2).get\_figure().savefig(**'heatmap.png'**)
* In the program seaborn is imported as sns so sns is used. We create the heatmap of the pivot table that was just created before and save the heatmap as heatmap.png

Code :

**import** numpy **as** np  
**import** pandas **as** pd  
**from** pandas **import** Series,DataFrame  
**import** seaborn **as** sns  
  
df = pd.read\_csv(**'data.csv'**)  
  
**print** df  
  
df2 = df.pivot\_table(index=**'year'**,columns=**'continent'**, values=**'lifeExp'**)  
**print** df2  
  
sns.heatmap(df2).get\_figure().savefig(**'heatmap.png'**)