Introduction

Hello My name is Inzamamul Alam Munna. I am a global intern at hash Analytics. I am from Bangladesh The land of nature. I am a Post Graduate Student of University of Dhaka Department of CSE. I am a Machine Learning Researcher in my university. Also I am a Collaborator at Facebook Developer Circle (Dhaka). I have a vast experience in Data Analyst and Machine Learning. I have few work experience in some familiar company.   
  
Today our Work at Assignment -03 in hash analytics is Create a HeatMap Plot in tableau Dashboard and also in python using seaborn.

Explanation

1. I first download the datasets from the website.
2. For Visualizing the data at 1st I use jupyter notebook which is my favorite. So I visualize it and see there is five columns as mentioned in the website also. They are: **country, year, pop, continent, lifeExp and gdpPercap**
3. I then read the main criteria of our work (assignment) and think how to do it. At first I think using the direct **pivot table** will be good. So I tested, works fine no problem.
4. But I think how can I put my hands dirty. so I am using to do **GroupBy**. Using the vocabulary of GroupBy. I might proceed using something like this: I group by continent and year, select lifeExp, apply a mean aggregate, combine the resulting groups, and then unstack the hierarchical index to reveal the hidden multidimensionality.
5. Why I use **mean aggregate.**  When I saw the data by using the **head(\_).** I realize the life expectancy in general is average will all the cases.
6. Then I saw the manipulating data by use **sns.heatmap .** where the **x axis is year** and **y axis is continent.** As the mentor asked.
7. **Number 2 – 6.** all the steps for data manipulation and seeing the data to seaborn I all did at first in jupyter notebook for my usability.

8) Then I put the pieces into the **python file** together and run the code. Then I realize I have to save

The visualization part. So I don’t take any screenshot because it is time lengthy. I write a function.

9) save it as **output.png**. Using the Tableau Desktop app, I visualize the **heat map** where I measures

Two things **Avg (LifeExp)** and **Sum(gdpPercap)** with along the **year Vs Continent.** Then Screen-

Shot the whole picture and save it as **Tableau\_HeatMap.png.**

10) Also I did a **Geo\_Map** for seeing the data how it looks like. I am attaching the file also.