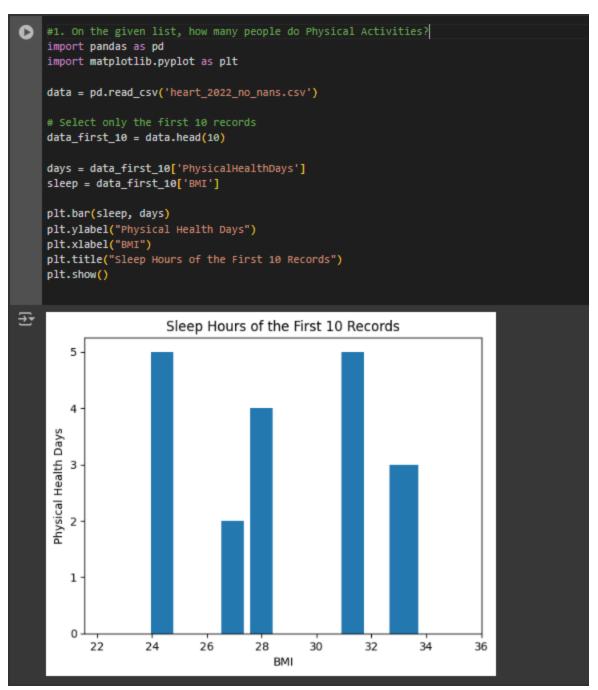
## Instructions:

- 1. Download the <u>Indicators of Heart Disease (2022 UPDATE)Links to an external site</u>. dataset from Kaggle, and load it into your Google Colab.
- 2. Familiarize yourself with the variables and observations using Pandas.
- 3. Then, formulate two questions based on your understanding of the dataset.
- 4. After which, you will need to answer these questions by producing a data visualization of your choice using Matplotlib.
- 5. Write your observation for each visualization, then take a screenshot of your work (one screenshot per visualization) to be uploaded as your final output.

## **2 QUESTIONS**

- 1. How Many Sleep Hours do people get when based on their Physical Health Days?
- 2. What is the average SleepHours of people get depending on their BMI?

1.)



This shows the average number of Physical Health Days get depending on their BMI. As seen on the graph, we can see that 5 days is the maximum number of Physical Days that people do and the lowest is 2 days only. While in the BMI 33BMI is the maximum and 24BMI is the lowest. Only the first 10 in the list was taken because the google collab is taking too much time on processing all of the numbers in the list that's why only the first 10.

```
#2. What is the average SleepHours of the male and female in the given list?
import pandas as pd
import matplotlib.pyplot as plt
data = pd.read_csv('heart_2022_no_nans.csv')
# Select only the first 50 records
data_first_50 = data.head(50)
days = data_first_50['BMI']
sleep = data_first_50['SleepHours']
plt.bar(sleep, days)
plt.ylabel("BMI")
plt.xlabel("Sleep Hours")
plt.title("Sleep Hours of the First 50 Records")
plt.show()
                    Sleep Hours of the First 50 Records
    40
    30
BM
   20
   10
                     5
                                       7
                              6
                                                                 10
                                  Sleep Hours
```

This shows the average number of sleep people get depending on their BMI. As seen on the graph we can see that the many people get 5 hours of sleep and the lowest is 4 while in the BMI the maximum is around 45 and the lowest is around 27. Only the first 50 in the list was taken because the google collab is taking too much time on processing all of the numbers in the list that's why only the first 50.