**Heart Attack Analysis**

**Introduction**

A heart attack occurs when an artery supplying your heart with blood and oxygen becomes blocked. A blood clot can form and block your arteries, causing a heart attack. This Heart Attack Analysis helps to understand the chance of attack occurrence in persons based on varied health conditions.

**Dataset**

The dataset is Heart\_Attack\_Analysis\_Data.csv. It has been uploaded to elearn.

This dataset contains data about some hundreds of patients mentioning Age, Sex, Exercise Include Angina(1=YES, 0=NO), CP\_Type (Chest Pain)(Value 1: typical angina, Value2: atypical angina, Value 3: non-anginal pain, Value 4: asymptomatic), ECG Results, Blood Pressure, Cholesterol, Blood Sugar, Family History (Number of persons affected in the family), Maximum Heart Rate, Target -0=LESS CHANCE , 1= MORE CHANCE

**Aim**

* Building a Predictive Model using Naïve Bayesian Approach (Which features decide heart attack?)
* Comment on the performance of this model using AUC-ROC, Precision, Recall, F\_score, Accuracy

**You need to**

1. Preprocess the data to enhance quality
2. Carry out descriptive summarization of data and make observations
3. Identify relevant, irrelevant attributes for building model.
4. Use data visualization tools and make observations
5. Carry out the chosen analytic task. Show results including intermediate results, as needed
6. Evaluate the solution

Following are some points for you to take note of, while doing the assignment in Jupyter Notebook:

* State all your assumptions clearly
* List all intermediate steps and learnings
* Mention your observations/findings

**Submission Details**

* Save your jupyter notebook as “BITS\_ID\_Name.ipynb” and upload it on elearn under “Assignment 1”
* Doc file is not required, you need to describe the activities you perform in the Jupiter notebook itself.
* Deadline**: 27th March, 2022 11:59 pm**

Kindly note, It’s an individual assignment, no group submissions allowed.