**HEART DISEASE PREDICITON USING ML**

**Steps to execute the code and run the project:**

* Since we have done our whole project in one ipynb file, there’s nothing complicated to execute our code.
* Download the dataset
* Change the directory of dataset (according to your directory)
* Finally execute the code step by step and you’ll see the code working

**Detailed Explanation:**

We first import the necessary libraries for our project. After this we import the dataset and understand it. Then we verify it as data frame object in pandas. Then we perform various data analysis operations in our data wich includes shaping of dataset, printing out a few columns from this large dataset. Then we worked on the descriptions like count, mean, std, min,25%, 50%, 75% and max values . Then we check that our dataset is complete or not that is it does not lack any values of the attributes. Then we have given the description of our dataset features explaining it by each column name. Then we have focused on target values and then we checked the correlation between the columns of our dataset.

Now we come to Exploratory Data Analysis(EDA) in which we have plotted graphs to get more clear picture of the data that we have taken. By performing this we found that females are more likely to have heart problems than males, the once with typical angina are much less likely to have heart problems, people with restecg ‘1’ and ‘0’ are more likely to have heart disease than with value ‘2’, once with ca value 4 has astonishingly large number of heart problems, people with exang value 1 are less likely to have heart problems and with slope 2 causes heart pain much more than slope 0 and 1.

Then we have trained and tested our data set and split it I 80 20 ratio. Then we have performed various algorithms. Each group member have performed 2 algorithms and got the accuracy level accordingly.