

Let's think you were appointed to develop an AI model to identify the **Cardiac Arrest** in **ECG** diagnosis. Your model needs to analyze the ECG footage and generate reports stating that whether there any **Cardiac Arrest** present or not. You have been provided by enough data for training and testing purpose. Now at first you need to train your newly developed model so that it can recognize the **Cardiac Arrest** and **No Cardiac Arrest** footage.

You were provided by total 280000 footages of **ECG** where 54% footages were **Cardiac Arrest** and rest footages were **No Cardiac Arrest**. Now your boss advised you to follow a 70-30 approach for splitting the dataset into training and test set. (Remember that for both training and testing data number of goals and not goals are equal).

- During the test phase your AI model successfully reported 92% samples of **Cardiac Arrest** as **Cardiac Arrest**.
- During the test phase your AI model successfully reported 88% samples of **No Cardiac Arrest** as **No Cardiac Arrest**.
- During the test phase your AI model unsuccessfully reported 8% samples of **Cardiac Arrest** as **No Cardiac Arrest**.
- During the test phase your AI model unsuccessfully reported 12% samples of **No Cardiac Arrest** as **Cardiac Arrest**.

Now considering the above scenario answer the following questions:

- a) Calculate the Precision
- b) Calculate the Recall
- c) Calculate FPR
- d) Calculate Accuracy