**Problem Statement**

Task 1:-Prepare a complete data analysis report on the given data.

Task 2:-Create a predictive model with implementation of different classifiers on liver patient diseases dataset to predict liver diseases.

Task3:- Create an analysis to show on what basis you have designed your model.

**Dataset Link:**

### Context

Patients with Liver disease have been continuously increasing because of excessive consumption of alcohol, inhale of harmful gases, intake of contaminated food, pickles and drugs. This dataset was used to evaluate prediction algorithms in an effort to reduce burden on doctors.

### Content

This data set contains 416 liver patient records and 167 non liver patient records collected from North East of Andhra Pradesh, India. The "Target" column is a class label used to divide groups into liver patients (liver disease) or not (no disease). This data set contains 441 male patient records and 142 female patient records.

Any patient whose age exceeded 89 is listed as being of age "90".

**Domain:** Healthcare

Attribute information:

* Age of the patient
* Gender of the patient
* Total Bilirubin
* Direct Bilirubin
* Alkaline Phosphotase
* Alamine Aminotransferase
* Aspartate Aminotransferase
* Total Protiens
* Albumin
* Albumin and Globulin Ratio
* Target: field used to split the data into two sets (1 : patient with liver disease and 2: patient with no liver disease disease)

Link : <https://d3ilbtxij3aepc.cloudfront.net/projects/CDS-Capstone-Projects/PRCP-1007-LiverPatientPred.zip>

**Model Comparison Report**

Create a report stating the performance of multiple models on this data and suggest the best model for production.

**Report on Challenges faced**

Create a report which should include challenges you faced on data and what technique used with proper reason.

Note:-All above tasks has to be created on a single jupyter notebook and share the same for the final submission.