

### **Introduction:**

Hello everyone,

My name is Veeresh Kumar.

This is my guided project from SmartInternz platform.

The title of the project is "Revolutionizing Liver Care: Predicting Liver Cirrhosis using Advanced Machine Learning Techniques".

### **Project overview :**

Liver cirrhosis is a serious liver disease. Early prediction helps doctors give better treatment.

In this project, I used machine learning techniques to predict whether a patient has liver cirrhosis based on medical data.

The dataset I used is the Indian Liver Patient Dataset.

### **Tools and Technologies:**

I used Python programming language, along with libraries like Pandas, NumPy, and Scikit-learn.

I used the Random Forest Classifier to build the prediction model.

### **Code Walkthrough**

Now I will show the code.

First, I imported all necessary libraries.

Then, I loaded the dataset using pandas.

I cleaned the data and converted the 'Gender' column into numeric format.

After that, I split the data into training and testing sets.

Then I trained the Random Forest Classifier model using the training data.

Now, I am running the model...

**(Now Press "Run" button show the output on screen)**

As you can see, the model accuracy is 1.0 — which means the model is predicting correctly for all the test data.

### **Conclusion:**

This model helps in predicting liver disease efficiently and can assist doctors for early diagnosis.

Thank you SmartInternz and mentors for this opportunity.

Thanks for watching!