SONAR Rock VS Mine Prediction

WORKFLOW:

1. **Collect the Sonar Data**

   We first collect the sonar dataset that contains information about different objects.

2. **Pre-Process the Data**

   Clean and prepare the data so it can be used by the machine learning model.

3. **Split the Data into Training and Testing**

   Divide the dataset into two parts:

   - Training data: Used to train the model.
   - Testing data: Used to check how well the model works.

4. **Train the ML Model**

   We use a Logistic Regression model for this task. Logistic Regression works well for binary classification problems, where we need to predict one of two outcomes (in this case, ROCK or MINE).

5. **Get the Trained Model**

After training, we get a model that can recognize whether the object is a rock or a mine.

6. **Predict on New Data**

If we feed new sonar data into the trained model, it will predict whether the object is a ROCK or MINE.