My Approach (This approach has answers to the most of the questions asked while performing the task)

Importing Libraries
I started by importing some tools that are helpful for working with data and building machine learning models.

Loading the Dataset- I loaded the "fraud.csv" dataset into my program. This dataset likely contains information about transactions and whether they are fraudulent or not.

Data Exploration- I looked into the dataset to understand it better. This included looking at its shape (how many rows and columns it has), the first few rows of data, information about the data types, and some basic statistics.

Data Cleaning- I checked if there were any missing values in the dataset. Fortunately, there were none.
I also looked for duplicate entries in the dataset but didn't find any.

Data Preparation- I decided to remove some columns that I considered unnecessary for my analysis.
I performed one-hot encoding on the 'type' column to convert categorical data into a format that the model can understand.

Defining Inputs and Outputs- I separated my dataset into two parts: the inputs (independent variables) and the output (dependent variable). In this case, the inputs are everything except the 'isFraud' column, which is my output.

Splitting the Data- I divided my data into two sets: one for training the model and one for testing the model. This helps me evaluate how well my model performs on new, unseen data.

Model Building- I chose to use a Logistic Regression model, which is a common method for binary classification problems like fraud detection. I trained the model using the training data, allowing it to learn patterns from the data.

Making Predictions- I used my trained model to make predictions on the test data to see how well it can identify fraudulent transactions.

Model Evaluation- I assessed the model's performance using various metrics like accuracy, precision, recall, and the F1-score. These metrics help me understand how well my model is doing in detecting fraud.

Conclusion- I observed that my model had a good accuracy rate, which suggests it's doing a decent job of identifying fraudulent transactions & can further be deployed to predict fraudulent

transactions in real-world scenarios.Companies can use Multi-Factor Authentication,secured websites/connections and use real time systems to reduce the fraudulent transactions.
Further on taking customers feedback and by continuous monitoring we can check if the actions implemented by us are worth it and working or not.