

Q. Given dataset contains details about the purchasing of cars. You have to perform the understated tasks –

1. Develop a binary classification model using ANN.
2. Perform the binary classification over the target variable – **“Purchased”**.
3. Split the data into train, test, and validation sets.
4. Show all the ANN layers, the number of neurons, and the activation function.
5. Fit the model with the relevant optimizer, loss function, and evaluation metric.
6. Plot the train set accuracy and validation set accuracy over epochs.
7. Plot the train set loss and validation set loss over epochs.
8. Calculate the model performance on the test set. [Test set accuracy should be **at least 75%**]
9. Show the classification report and confusion matrix.