SPRINT 4

Date	03 November 2022
Team ID	PNT2022TMID24730
Project Name	DETECTING PARKINSON'S DISEASE USING MACHINE LEARNING
Maximum Marks	4 Marks

7. Initialize an XGBClassifier and train the model. This classifies using extreme Gradient Boosting- using gradient boosting algorithms for modern data science problems. It falls under the category of Ensemble Learning in ML, where we train and predict using many models to produce one superior output.

- #DataFlair - Train the model
- model=XGBClassifier()
- model.fit(x_train,y_train)

Output Screenshot:

```
[7]: #DataFlair - Train the model
     model=XGBClassifier()
     model.fit(x_train,y_train)

[7]: XGBClassifier(base_score=0.5, booster='gbtree', colsample_bylevel=1,
                   colsample_bynode=1, colsample_bytree=1, gamma=0,
                   learning_rate=0.1, max_delta_step=0, max_depth=3,
                   min_child_weight=1, missing=None, n_estimators=100, n_jobs=1,
                   nthread=None, objective='binary:logistic', random_state=0,
                   reg_alpha=0, reg_lambda=1, scale_pos_weight=1, seed=None,
                   silent=None, subsample=1, verbosity=1)
```

8. Finally, generate y_pred (predicted values for x_test) and calculate the accuracy for the model. Print it out.

- # DataFlair - Calculate the accuracy
- y_pred=model.predict(x_test)

- print(accuracy_score(y_test, y_pred)*100)

Output Screenshot: