SWETHA CHEPURI

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CSE-M1

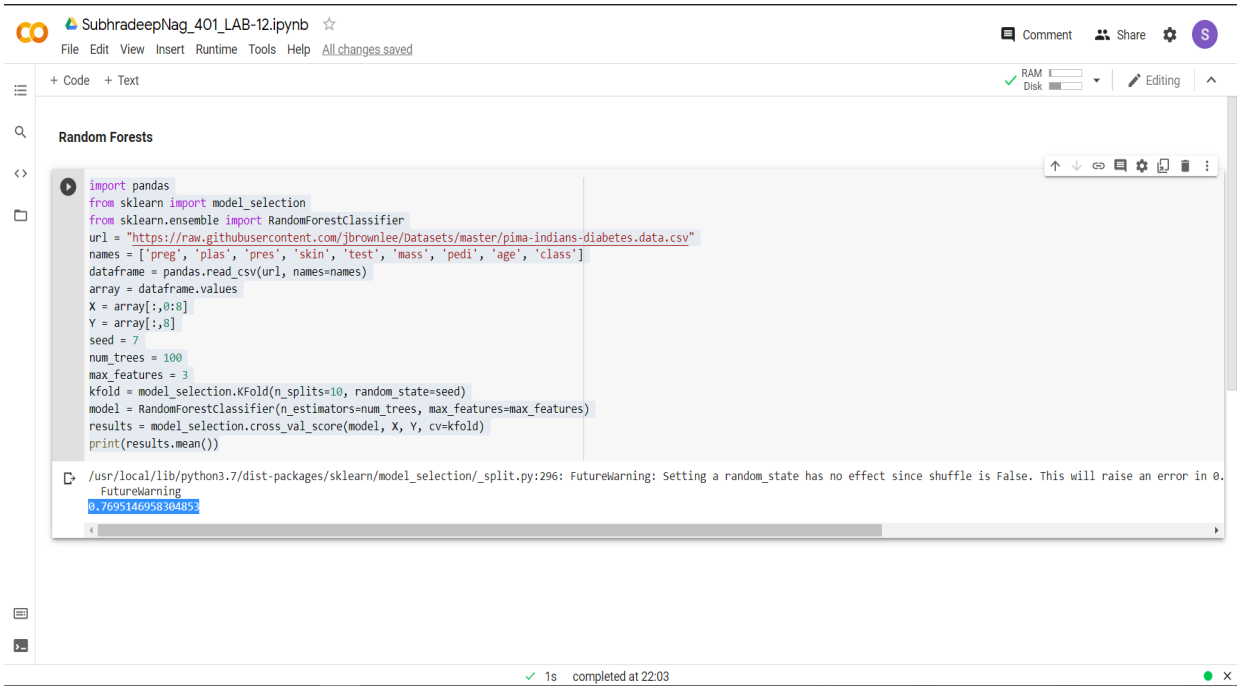
LAB 12: Ensemble Learning Model

Code:

Random Forests

```
import pandas
from sklearn import model_selection
from sklearn.ensemble import RandomForestClassifier
url = "https://raw.githubusercontent.com/jbrownlee/Datasets/master/pima
-indians-diabetes.data.csv"
names = ['preg', 'plas', 'pres', 'skin', 'test', 'mass', 'pedi', 'age',
 'class']
dataframe = pandas.read_csv(url, names=names)
array = dataframe.values
X = array[:,0:8]
Y = array[:,8]
seed = 7
num_trees = 100
max_features = 3
kfold = model_selection.KFold(n_splits=10, random_state=seed)
model = RandomForestClassifier(n_estimators=num_trees, max_features=max
_features)
results = model_selection.cross_val_score(model, X, Y, cv=kfold)
print(results.mean())
```

Output:



Ans - 0.7695146958304853