```
# Import your libraries and data

import pandas as pd
from sklearn.model_selection import train_test_split
from sklearn.ensemble import RandomForestClassifier
from sklearn.metrics import accuracy_score

data = pd.read_csv('C:/Users/PandaBas/Desktop/Personal/Teaching/5thSem_PartA
/bank_marketing.csv')
data.head()


# Choose the dependent and Independent variables
X = data[['age','marital','ever_defaulted','housing_loan','Personal_loan']]
Y = data[['y']]


# Train, test/validation split
X_train, X_test, y_train, y_test = train_test_split(X,Y, test_size = 0.20,
random_state = 42)
test_df = pd.concat ([X_test,y_test],axis =1 )


# Initialize and train your model
clf = RandomForestClassifier(random_state = 42)
clf.fit(X_train, y_train)

# Predict the test data based on the trained model
rf_pred = clf.predict(X_test)
accuracy_score(y_test, rf_pred)
```