Source Code :

fromsklearn.ensemble import RandomForestClassifier

from sklearn.model\_selection import train\_test\_split

from sklearn.metrics import classification\_report

from imblearn.over\_sampling import SMOTE

# Load data

df = pd.read\_csv('patient\_data.csv')

X = df.drop('disease', axis=1)

y = df['disease']

# Balance data

smote = SMOTE()

X\_res, y\_res = smote.fit\_resample(X, y)

# Train-test split

X\_train, X\_test, y\_train, y\_test = train\_test\_split(X\_res, y\_res, test\_size=0.2)

# Model

rf = RandomForestClassifier()

rf.fit(X\_train, y\_train)

y\_pred = rf.predict(X\_test)

print(classification\_report(y\_test, y\_pred))