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ROLL NO: 25

## PRACTICAL: 3

```
from sklearn.datasets import load_breast_cancer
from sklearn.model_selection import train_test_split

# Load the Breast Cancer dataset
breast_cancer = load_breast_cancer()
X = breast_cancer.data
y = breast_cancer.target

# Split the data into training and testing sets (80% training, 20% testing)
X_train, X_test, y_train, y_test = train_test_split(X, y,
test_size=0.2, random_state=42)

# Display the shapes of the resulting sets
print("\nBreast Cancer Dataset:")
print("Training set shapes:")
print("X_train:", X_train.shape)
print("y_train:", y_train.shape)
print("\nTesting set shapes:")
print("X_test:", X_test.shape)
print("y_test:", y_test.shape)
```

Breast Cancer Dataset:

Training set shapes:

X\_train: (455, 30)

y\_train: (455,)

Testing set shapes:

X\_test: (114, 30)

y\_test: (114,)