

```
In [23]:          '/home/ds-lab/4VP23CS070_ML/EXP-8/Exp8.py'          = '/home/ds-lab/4VP23CS070_ML/EXP-8'
```

Accuracy of Decision Tree Classifier: 0.95

Decision Tree Rules:

```
|--- mean concave points <= 0.05
|   |--- worst radius <= 16.83
|   |   |--- area error <= 48.70
|   |   |   |--- worst smoothness <= 0.18
|   |   |   |   |--- smoothness error <= 0.00
|   |   |   |   |   |--- worst texture <= 27.76
|   |   |   |   |   |   |--- class: 1
|   |   |   |   |   |--- worst texture > 27.76
|   |   |   |   |   |   |--- class: 0
|   |   |   |   |--- smoothness error > 0.00
|   |   |   |   |   |--- worst texture <= 33.35
|   |   |   |   |   |   |--- class: 1
|   |   |   |   |   |--- worst texture > 33.35
|   |   |   |   |   |   |--- worst texture <= 33.56
|   |   |   |   |   |   |   |--- class: 0
|   |   |   |   |   |   |--- worst texture > 33.56
|   |   |   |   |   |   |   |--- class: 1
|   |   |   |   |--- worst smoothness > 0.18
|   |   |   |   |   |--- class: 0
|   |   |   |--- area error > 48.70
|   |   |   |   |--- concavity error <= 0.02
|   |   |   |   |   |--- class: 0
|   |   |   |   |--- concavity error > 0.02
|   |   |   |   |   |--- class: 1
|   |   |--- worst radius > 16.83
|   |   |   |--- mean texture <= 16.19
|   |   |   |   |--- class: 1
|   |   |   |--- mean texture > 16.19
|   |   |   |   |--- concave points error <= 0.01
|   |   |   |   |   |--- class: 0
|   |   |   |   |--- concave points error > 0.01
|   |   |   |   |   |--- class: 1
|--- mean concave points > 0.05
|   |--- worst concave points <= 0.15
|   |   |--- worst perimeter <= 115.25
|   |   |   |--- mean texture <= 21.06
|   |   |   |   |--- class: 1
|   |   |   |--- mean texture > 21.06
|   |   |   |   |--- class: 0
|   |   |--- worst perimeter > 115.25
|   |   |   |--- class: 0
|   |--- worst concave points > 0.15
|   |   |--- fractal dimension error <= 0.01
|   |   |   |--- class: 0
|   |   |--- fractal dimension error > 0.01
|   |   |   |--- class: 1
```

The predicted class for the new sample is: Benign

```
In [24]:
```