ML with Python



Logistic Regression Assignment

We are interested in the below variables which help in deciding whether the pain is normal or abnor mal. (after opening dataset rename columns in the below sequence)

Pelvis Incidence

Pelvic Tilt

Lumbar Lordosis Angle

Sacral Slope

Pelvic Radius

Spondylolisthesis Degree

Pelvic Slope

Direct Tilt

Thoracic Slope

Cervical Tilt

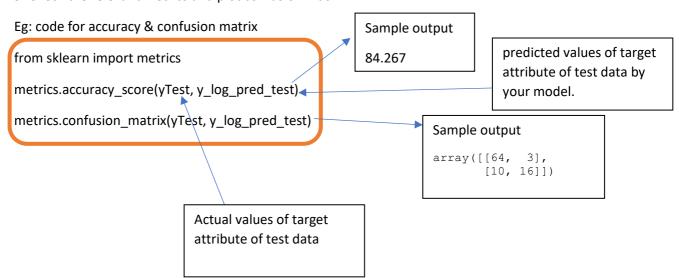
Sacrum Angle

Scoliosis Slope

Outcome

This dataset has binary response variable called **outcome.** There are 12 predictor variables. We will t reat all the variables as continuous.

- 1. Import and check the shape of data
- 2. Rename each column with the names given in this document
- 3. Create a heatmap
- 4. Use describe() to understand the distribution of data
- 5. take outcome attribute as target attribute
- 6. Import standardscaler and standardize the data.
- 7. Split the data in to train and test data in different ratio from 60:40 to 80:20
- 8. Apply logistic regression to predict is the pain normal or abnormal.
- 9. Check the relevant metrics and plot confusion matrix.



Solutions to this question paper will be uploaded on lms after 2 days