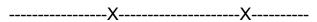# Features vs Labels

-----------------X--------------------X----------
Features is a common term for all different types of datasets while labels is specific to classification datasets.
Classification and regression are two different types of datasets.
Regression is when the to-be-predicted value is a continuous variable.
Classification is when the to-be-predicted value is a discrete variable.
Before features we need to define the difference between training dataset and testing dataset.
The training dataset is the one on which we train the model. It is the dataset from which the model learns, makes generalizations and finds different co-relations between the dataset and what needs to be predicted.

For example you have to predict if a given tumour is malignant or benign. Then this will depend on various factors like the age of the patient, sugar levels, family history etc. These different factors are known as **features**.
The final value to be predicted that the tumour is malignant or benign is known as the label(s).