# BREAST CANCER PREDICTION

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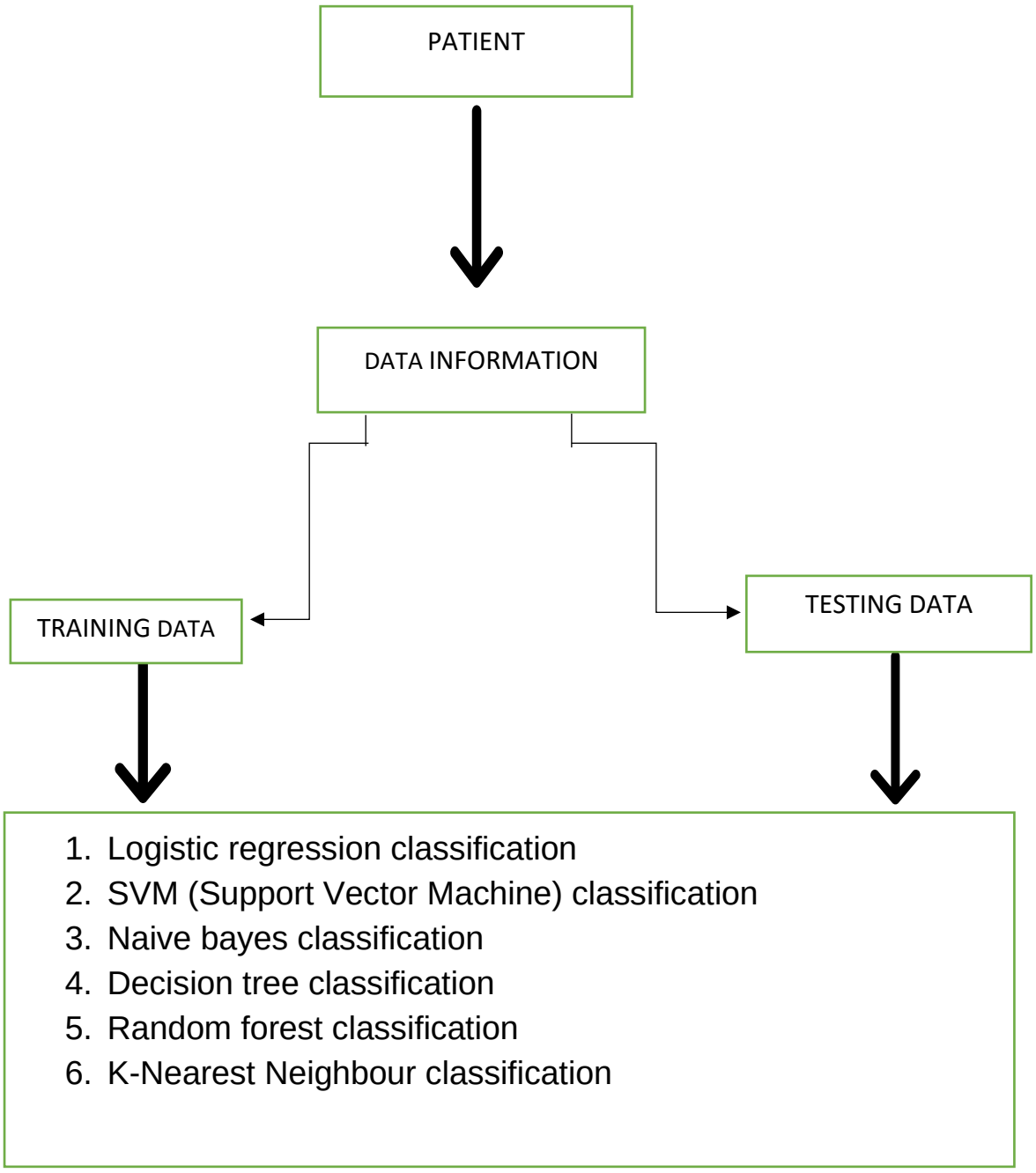
DSWP: BATCH 19




## WHAT IS BREAST CANCER?

Breast cancer could be a disease within which cells within the breast grow out of control. There are different varieties of carcinoma. the type of carcinoma depends on which cells within the breast grow to be cancer.

Breast cancer can begin in numerous parts of the breast.A breast is formed from three main parts: lobules, ducts, and connective tissue.

## STEPS TO BE FOLLOWED:

1.Importing Necessary Libraries

2.Load the Dataset

3.Visualize the data

4. Split the data frame into train and test data frames. For this study using a sample size of 20%, assumed it ideal ratio between training and testing.
5.Train 6 models using the training data:

- Logistic regression classification
- SVM (Support Vector Machine) classification
- Naive bayes classification
- Decision tree classification
- Random forest classification
- K-Nearest Neighbour classification

We measure the study of 7 different algorithms using a **confusion matrix**.
6. Compare the Classification Techniques
7.Plotting the ROC Curve-plot the ROC curve to illustrate the diagnostic ability of a binary classifier system as its discrimination threshold is varied.

# CONCLUSION

From the study, we conclude that the machine learning techniques are able to detect the disease automatically with high accuracy.