# Diabetes Prediction

## SVM (Support Vector Machine):

- SVM is one of the important algorithms used in supervised learning
- The model is trained using features like blood sugar level, insulin level, BMI, etc., to predict whether a person is diabetic or non-diabetic.
- Once data is fed into SVM, it plots the data points and tries to find a hyperplane that best separates the two classes.
- The hyperplane divides the data into two groups: diabetic and non-diabetic.

## Workflow:

1. Get the diabetes dataset.
2. Pre-process the data (handle missing values, normalize/scale data if required).
3. Split the data into training and testing sets.
4. Train the SVM model on the training data and evaluate its accuracy on the testing data.
5. Feed new data into the trained SVM model.
6. The trained SVM model predicts whether the patient is diabetic or non-diabetic.