A PROJECT OF 'DIABETES PREDICTION USING MACHINE LEARNING ALGORITHMS USING PYTHON'.

PROBLEM STATEMENT :

- The objective of this diabetes dataset is to predict whether patient has diabetes or not.

DATASET DESCRIPTION :

The dataset consist of several medical predictor (Independent) variables and one target variable (Outcome). Predictor variable includes Pregnancies, Glucose, Blood Pressure, Skin Thickness, Insulin, BMI, DiabetesPedigreeFunction, Age & Outcome. Several constraints were placed on the selection of these instances from a larger database. In particular, all patients here are females at least 21 years old of Pima Indian heritage.

- Pregnancies : Number of times pregnant
- Glucose : Plasma glucose concentration a 2 hours in an oral glucose tolerance test
- Blood Pressure : Diastolic blood pressure (mm Hg)
- Skin Thickness : Triceps skin fold thickness (mm)
- Insulin : 2-Hour serum insulin (mu U/ml)
- BMI : Body mass index (weight in kg/(height in m)^2)
- DiabetesPedigreeFunction: Diabetes pedigree function
- Age: Age (years)
- Outcome: Class variable (0 or 1)

OBJECTIVE OF DATASET :

This dataset is related to Diabetes diseases. The objective of the dataset is to diagnostically predict whether or not a patient has diabetes, based on certain diagnostic measurements included in the dataset. This research work aims to analyze the Diabetes dataset, design, and implement a Diabetes prediction and utilizing machine learning classification techniques.

GOAL OF DATASET :

Make better prediction for diabetes patients. The goal of diabetes data is to keep blood glucose levels as close to normal as safely possible. Since diabetes may greatly increase risk for heart disease and peripheral artery disease, measures to control blood pressure and cholesterol levels are an essential part of diabetes treatment as well.