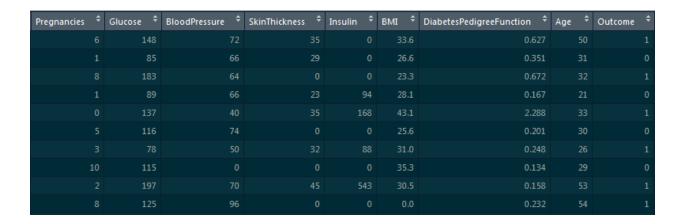


Module 4: Keras Assignment

Problem Statement:

Consider yourself to be Matt, who is a Deep Learning Engineer at a prestigious company. Your company is working with the National Institute of Diabetes to find out what are the factors which lead up to a patient having diabetes.

Dataset Used:



Tasks to be Done:

- A. Build a sequential model using Keras on top of this Diabetes dataset to find out if the patient has diabetes or not, using 'Pregnancies', 'Glucose' & 'BloodPressure' as independent columns.
 - a. This model should have 1 hidden layer with 8 nodes
 - b. Use Stochastic Gradient as the optimization algorithm
 - c. Fit the model, with number of epochs to be 100 and batch size to be 10
- B. Build another sequential model where 'Outcome' is the dependent variable and all other columns are predictors.
 - a. This model should have 3 hidden layers with 16 nodes in each layer
 - b. Use 'adam' as the optimization algorithm
 - c. Fit the model, with number of epochs to be 150 and batch size to be 10