

Description

The dataset contains several medical predictor (Independent) variables and one target variable, (Outcome). Predictor variables include:

1. Pregnancies
2. Glucose
3. BloodPressure
4. SkinThickness
5. Insulin
6. BMI
7. DiabetesPedigreeFunction
8. Age

Dataset url: <https://www.kaggle.com/datasets/uciml/pima-indians-diabetes-database>

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.

- 1) Pregnancies: Number of times pregnant
- 2) Glucose: Plasma glucose concentration a 2 hours in an oral glucose tolerance test
- 3) BloodPressure: Diastolic blood pressure (mm Hg)
- 4) SkinThickness: Triceps skin fold thickness (mm)
- 5) Insulin: 2-Hour serum insulin (μ U/ml)
- 6) BMI: Body mass index ($\text{weight in kg}/(\text{height in m})^2$)
- 7) DiabetesPedigreeFunction: Diabetes pedigree function
- 8) Age: Age (years)
- 9) Outcome: Class variable (0 or 1)

Step 1: Importing Libraries

```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

Step 2: Load the Dataset

```
diabetes_dataset = pd.read_csv('diabetes.csv')
```