Student Number: [Your Student Number]

GitHub Repository: [Link to your GitHub repository]

**Introduction:**

In this report, we will perform an exploratory data analysis (EDA) on the Diabetes dataset. The dataset contains various attributes related to diabetes patients, such as age, BMI, blood pressure, and diabetes progression after one year of treatment. The goal of this analysis is to gain insights into the relationships between different features and the progression of diabetes.

1. **A screenshot of a computer

   Description automatically generatedLoading the Dataset:**

Let's start by loading the dataset and taking a brief look at its structure.

**2. Histogram of Age:**

A graph with blue bars

Description automatically generated

Now, let's visualize the distribution of ages in the dataset using a histogram.

**A screen shot of a graph

Description automatically generated4. Scatter Plot of BMI vs. Blood Pressure:**

We can explore the relationship between BMI and blood pressure using a scatter plot.

**A screenshot of a data analysis

Description automatically generatedA computer screen shot of a code

Description automatically generated5. Correlation Matrix:**

Let's calculate the correlation matrix to understand the relationships between different features.

**Conclusion**:

In this report, we performed an exploratory data analysis of the Diabetes dataset. We visualized the distribution of age, explored the relationship between BMI and blood pressure using a scatter plot, and calculated the correlation matrix to understand feature relationships. This analysis provides valuable insights into the dataset, which can be further explored in future studies.