Scenario 5:

Key insights from the dataset:

As a fitness trainer, it is an essential to know the impact of food habits and exercises on personal health. One of the important diseases is Diabetes and if analyzed, we can understand some minor changes in our diet that can reduce Diabetes. There are some diagnoses that can show the impact it can have on Diabetes.

The dataset is imported from the sklearn library. The diabetes dataset contains information on age, sex, bmi, bp and s variables. The dataset is Standardized already, hence the mean for the numerical columns are very close to 0. There is almost an equal number of men and women of 207 and 235.

s1: TCH (Total Cholesterol)

s2: LDL (Low-Density Lipoprotein Cholesterol)

s3: HDL (High-Density Lipoprotein Cholesterol)

s4: TCH/HDL ratio

s5: LTG (log of Serum Triglycerides level)

s6: GLU (Blood Glucose level)

In all the above variables considered from s1 to s6, the disease has a positive correlation with the variables except for High-density lipoprotein cholestrol. In high density lipoprotein cholestrol, with the increse in the HDL,the disease progression decreases, meaning, there is a negative correlation. The correlation between the bmi and target and bp against target is higher compared to other variables. The lowest correlation is between age and target, meaning age is the least dependance

Ideas for your role-playing scenario (audience, setting, visualizations):

For the challenge, we chose the 5th scenario where we want to Highlight the role of exercise, diet, and physical fitness in managing and preventing diabetes. I will be taking the role of a fitness trainer.Example, I will find the foods that will be rich in certain foods that will increase level of insulin in blood to reduce Type 1 diabetes. the The audience will be people who are body builders and what kind of food that they should take such that their diabetes is in control. Connect diabetes data to fitness practices by measuring which kind of food will help in reducing the disease. We will be analysing which change in the body or what majorly causes the disease and will research on which kind of exercises will help reduce the diabetes.

Name:

Vaishnavi