**Dataset Column Breakdown:**

Each row in the dataset represents an individual with various attributes related to heart health. The last column, "target," indicates whether the person experienced a heart attack (1) or not (0).

age:

Description: Age of the individual.

Interpretation: Age is a critical factor in assessing heart health, as the risk of cardiovascular diseases tends to increase with age.

sex:

Description: Gender of the individual (1 for male, 0 for female).

Interpretation: Gender can influence heart health risk factors and outcomes, with males generally having a higher risk of heart disease compared to females.

cp:

Description: Chest pain type.

Interpretation: Different types of chest pain can indicate varying degrees of heart health risks. Understanding the type of chest pain can aid in diagnosing heart-related conditions.

trestbps:

Description: Resting blood pressure.

Interpretation: Elevated blood pressure is a significant risk factor for heart disease and can indicate the presence of hypertension, a leading cause of cardiovascular morbidity and mortality.

chol:

Description: Serum cholesterol level.

Interpretation: Elevated cholesterol levels, particularly LDL cholesterol, are associated with an increased risk of atherosclerosis and coronary artery disease.

fbs:

Description: Fasting blood sugar level.

Interpretation: High fasting blood sugar levels may indicate insulin resistance or diabetes, both of which are significant risk factors for heart disease.

restecg:

Description: Resting electrocardiographic results.

Interpretation: Abnormal electrocardiographic findings, such as ST-T wave abnormalities, can provide insights into underlying cardiac conditions and aid in diagnosing heart disease.

thalach:

Description: Maximum heart rate achieved.

Interpretation: Maximum heart rate achieved during exercise testing is an indicator of cardiovascular fitness and can help assess heart health and functional capacity.

exang:

Description: Exercise induced angina (1 for yes, 0 for no).

Interpretation: Exercise-induced angina can indicate underlying coronary artery disease and is a significant symptom to consider in heart health assessment.

oldpeak:

Description: ST depression induced by exercise relative to rest.

Interpretation: ST depression during exercise testing is a marker of myocardial ischemia and can help identify individuals at risk for coronary artery disease.

slope:

Description: Slope of the peak exercise ST segment.

Interpretation: The slope of the ST segment during exercise testing can provide additional information about the severity and extent of myocardial ischemia.

ca:

Description: Number of major vessels colored by fluoroscopy.

Interpretation: The number of major vessels with fluoroscopic abnormalities can indicate the severity and extent of coronary artery disease.

thal:

Description: Thalassemia.

Interpretation: Thalassemia is a genetic disorder that can affect red blood cell production and may have implications for cardiovascular health.

target:

Description: Presence of heart attack (1 for yes, 0 for no).

Interpretation: The target variable indicates whether the individual experienced a heart attack, serving as the outcome variable for predictive modeling tasks.