Detect Heart Disease using patient data.

# Objective

Build a system that can predict if a patient has heart disease. Explore the data, understand the features, and figure out an approach.

# Dataset

This dataset contains data about patient vitals and heart disease(if any) of the same. Description of columns:

|  |  |  |  |
| --- | --- | --- | --- |
| **Attribute** | **Code given** | **Unit** | **Data type** |
| age | Age | in years | Numeric |
| sex | Sex | 0 = female,  1 = male | Binary |
| chest pain type | chest pain type | 1 = typical angina,  2 = atypical angina,  3 = non-anginal pain,  4 = asymptomatic | Nominal |
| resting blood pressure | resting bp s | in mm Hg | Numeric |
| serum cholesterol | cholesterol | in mg/dl | Numeric |
| fasting blood sugar | fasting blood  sugar | 1 = sugar > 120mg/dL  0 = sugar < 120mg/dL | Binary |
| resting electrocardiogram results | resting ecg | 0 = normal,  1 = ST-T wave abnormality (T wave inversions and/or ST elevation/depression of > 0.05 mV), 2 = Probable or Definite Left Ventricular hypertrophy by Estes’ criteria | Nominal |
| maximum heart rate  achieved | max heart rate | 71–202 | Numeric |
| exercise induced angina | exercise angina | 0 = no,  1 = yes | Binary |
| oldpeak =ST | oldpeak | depression | Numeric |
| the slope of the peak exercise ST segment | ST slope | 1 = upward  2 = flat,  3 = downward | Nominal |
| class | target | 0 = Normal,  1 = Heart Disease | Binary |