**Description**:

This project describes about the prediction of occurrence of heart disease in a patient when all the values are provided.

For this project I have taken UCI’s Hungarian Heart disease data set.

The columns in the dataset are

1. (age) :age in years

3. (cp):chest pain type

-- Value 1: typical angina

-- Value 2: atypical angina

-- Value 3: non-anginal pain

-- Value 4: asymptomatic

4. (trestbps) :resting blood pressure (in mm Hg on admission to the hospital)

5. (chol) :serum cholestoral in mg/dl

6. (fbs) (fasting blood sugar > 120 mg/dl) (1 = true; 0 = false)

7. (restecg):resting electrocardiographic results

-- Value 0: normal

-- Value 1: having ST-T wave abnormality (T wave inversions and/or ST elevation or depression of > 0.05 mV)

-- Value 2: showing probable or definite left ventricular hypertrophy by Estes' criteria

8. (thalach) :maximum heart rate achieved

9. (exang) :exercise induced angina (1 = yes; 0 = no)

10. (oldpeak) = ST depression induced by exercise relative to rest

11. (slope) :the slope of the peak exercise ST segment

-- Value 1: upsloping

-- Value 2: flat

-- Value 3: downsloping

12. (ca) :number of major vessels (0-3) colored by flourosopy

13. thal: 3 = normal; 6 = fixed defect; 7 = reversable defect

14. (num) (the predicted attribute) :diagnosis of heart disease (angiographic disease status)

-- Value 0: < 50% diameter narrowing

-- Value 1: > 50% diameter narrowing

(in any major vessel: attributes 59 through 68 are vessels)