```
In [13]: import numpy as np
         import matplotlib.pyplot as plt
         import pandas as pd
In [14]: df=pd.read_csv('heart.csv')
         df.head()
         df=df.drop(columns=['thal'])
Out[14]:
             age sex cp trestbps chol fbs restecg thalach exang oldpeak slope ca target
           0 63
                   1 3
                             145
                                 233
                                                    150
                                                                  2.3
                                                                         0 0
                                       1
                                              0
                                                            0
                                                                                  1
           1
              37
                   1 2
                             130
                                 250
                                       0
                                                    187
                                                                  3.5
                                                                         0 0
                                                                                  1
           2
             41
                   0
                      1
                             130
                                 204
                                       0
                                              0
                                                    172
                                                            0
                                                                  1.4
                                                                         2 0
                                                                                  1
           3
              56
                   1 1
                             120
                                 236
                                       0
                                              1
                                                    178
                                                            0
                                                                  8.0
                                                                         2 0
                                                                                  1
           4
              57
                   0
                      0
                             120
                                 354
                                       0
                                              1
                                                    163
                                                            1
                                                                  0.6
                                                                         2 0
                                                                                  1
                             140 241
         298
              57
                   0
                      0
                                       0
                                              1
                                                    123
                                                            1
                                                                  0.2
                                                                         1 0
                                                                                  0
         299
              45
                   1
                      3
                             110 264
                                       0
                                              1
                                                    132
                                                            0
                                                                  1.2
                                                                         1 0
                                                                                  0
                   1
                      0
                             144 193
                                       1
                                              1
                                                    141
                                                            0
                                                                  3.4
                                                                         1 2
                                                                                  0
         300
              68
         301
              57
                   1
                      0
                             130
                                 131
                                       0
                                                    115
                                                                  1.2
                                                                         1 1
         302
              57
                   0
                      1
                             130 236
                                       0
                                              0
                                                    174
                                                            0
                                                                  0.0
                                                                         1 1
                                                                                  0
        303 rows × 13 columns
In [15]: independent=df[["age", "sex", "cp", "trestbps", "chol", "fbs", "restecg", "thalach", "exang", "oldpeak", "slope", "ca"]]
         dependent=df[["target"]]
         from sklearn.model_selection import train_test_split
         X_train, X_test, Y_train, Y_test=train_test_split(independent, dependent, test_size=1/3, random_state=0)
In [16]: from sklearn.svm import SVC
         Classifier=SVC(kernel='rbf', random_state=0)
         Classifier.fit(X_train,Y_train)
         C:\ProgramData\anaconda3\Lib\site-packages\sklearn\utils\validation.py:1184: DataConversionWarning: A column-vector y was passed when a 1d array was expected.
         Please change the shape of y to (n_samples, ), for example using ravel().
           y = column_or_1d(y, warn=True)
                   SVC
         SVC(random_state=0)
In [17]: Y_pred=Classifier.predict(X_test)
In [18]: age=int(input("enter the age value"))
         sex=int(input("enter the sex value"))
         cp=int(input("enter the cp value"))
         trestbps=int(input("enter the trestbps value"))
         chol=int(input("enter the chol value"))
         fbs=int(input("enter the fbs value"))
         restecg=int(input("enter the restecg value"))
         thalach=int(input("enter the thalach value"))
         exang=int(input("enter the exang value"))
         oldpeak=float(input("enter the oldpeak value"))
         slope=int(input("enter the slope value"))
         ca=int(input("enter the ca value"))
         future_prediction=Classifier.predict([[age,sex,cp,trestbps,chol,fbs,restecg,thalach,exang,oldpeak,slope,ca,]])
         print("future_prediction={Purchased=0, Non Purchased=1}", format(future_prediction))
         enter the age value54
         enter the sex value1
         enter the cp value0
         enter the trestbps value58
         enter the chol value10
         enter the fbs value25
         enter the restecg value025
         enter the thalach value25
         enter the exang value120
         enter the oldpeak value254.3
         enter the slope value250
         enter the ca value320
         future_prediction={Purchased=0,Non Purchased=1} [1]
         C:\ProgramData\anaconda3\Lib\site-packages\sklearn\base.py:464: UserWarning: X does not have valid feature names, but SVC was fitted with feature names
          warnings.warn(
```