**LAB # 04**

**Task # 1: Using python implement Decision Tree Algorithm on Heart Attack Analysis & prediction dataset to predict the chances of heart failure in a person. visualize the results of the model in the form of a confusion matrix using matplotlib and seaborn.**

**Solution:**

A picture containing application

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

Graphical user interface, text, application

Description automatically generated

A picture containing chart

Description automatically generated

Text

Description automatically generated

Graphical user interface

Description automatically generated with low confidence

**Task # 2: Using Knime implement Task # 01.**

**Solution:**

A picture containing text, map, light

Description automatically generated

**Output:**

Chart, line chart

Description automatically generated

**Task # 3: Perform the parameter tuning to optimize the Decision Tree performance and compare the results with task # 1.**

**Solution:**

Graphical user interface, text, application

Description automatically generated