Bahria University,

Karachi Campus

A picture containing text, room

Description automatically generated

LAB EXPERIMENT NO.

**11**

LIST OF TASKS

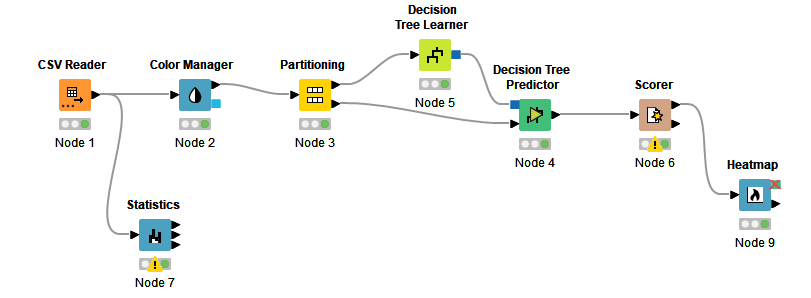
|  |  |
| --- | --- |
| TASK NO. | OBJECTIVE |
| **1** | **Train a Decision Tree to predict whether or not a person earns more than 50k per year.** |
| 2 | Read classification data set and apply decision tree learner on it.  Show histogram and scatter plot of dataset |

Submitted On:

**Task 1:** Train a Decision Tree to predict whether or not a person earns more than 50k per year.

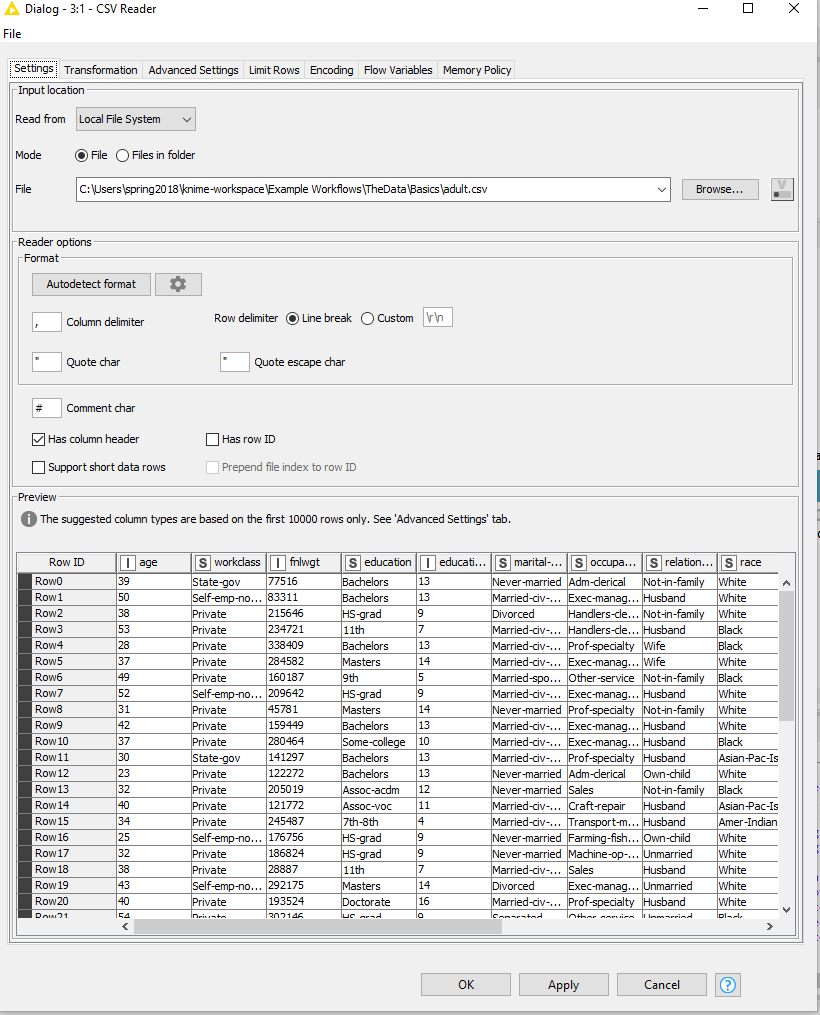
* Partition the dataset into a training set (75%) and a test set (25%) using the Partitioning
* Node with the stratified sampling option on the column “Income”.
* Use the Decision Tree Learner Node to train the model on the training set and
* The Decision Tree Predictor Node to apply the model to the test set.
* Use the Scorer node to evaluate the accuracy of the model.

**SOLUTION:**

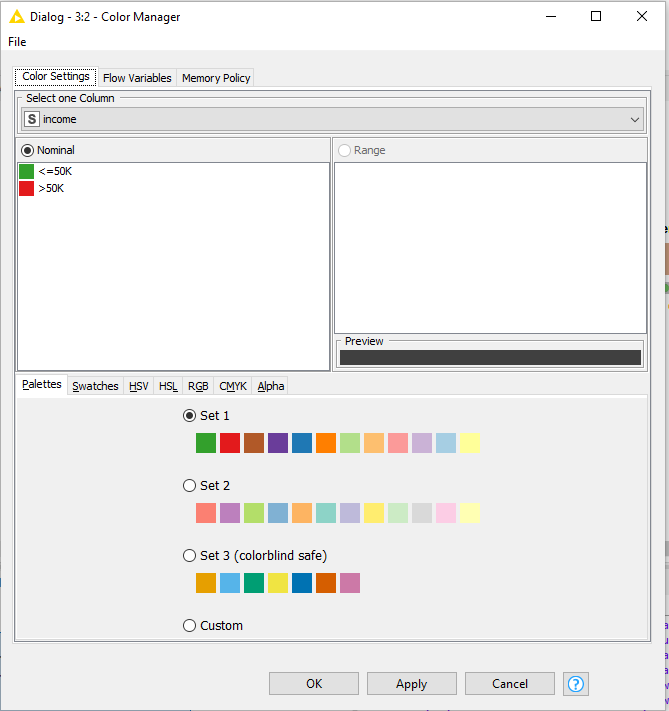


**DATASET (CHURN MODELING)**

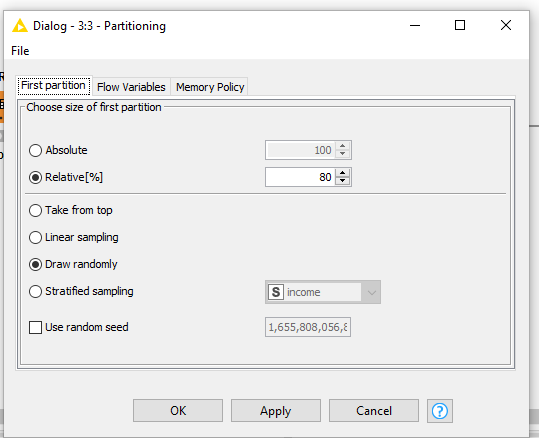
**Csv reader:**



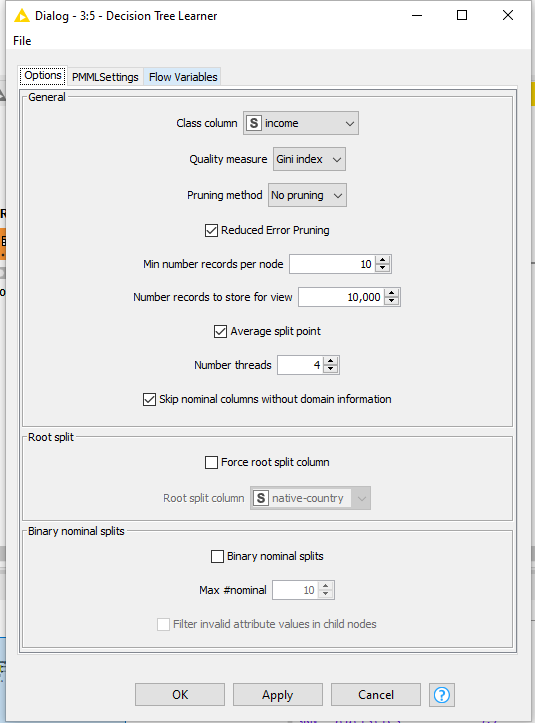
**Color manager:**



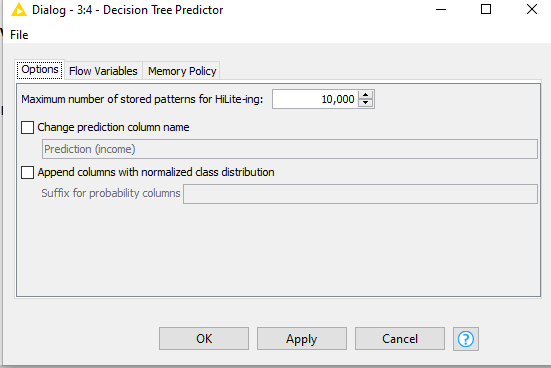
**Partitioning:**



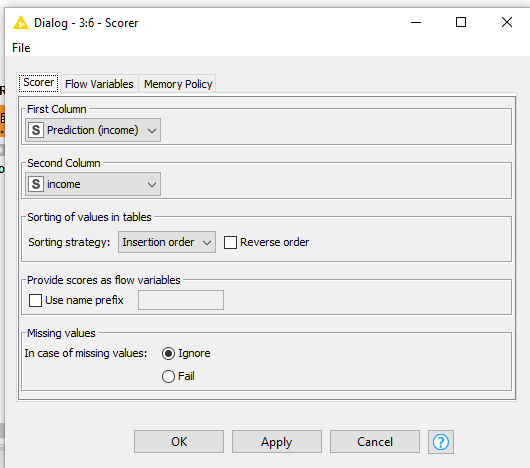
**Decision tree learner:**



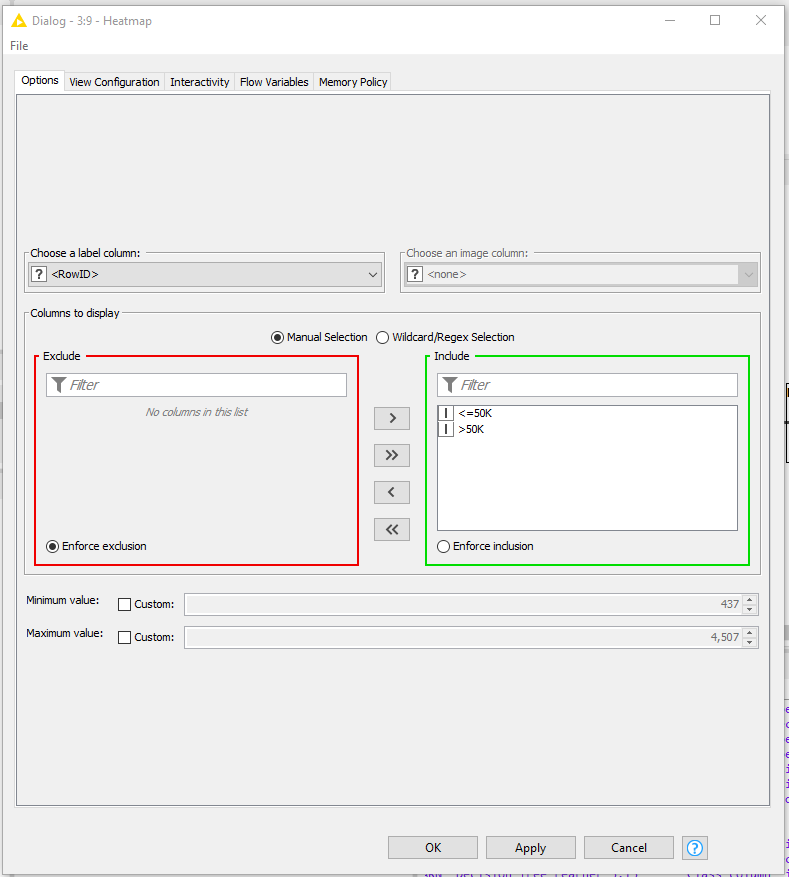
**Decision tree predictor:**



**Scorer:**



**Heatmap:**





**Task 2: Read classification data set and apply decision tree learner on it.**

**Show histogram and scatter plot of dataset**

**A picture containing text, sky, map, light

Description automatically generatedSOLUTION:**

**Csv Reader:**

**DATASET (CHURN MODELING)**

Graphical user interface, application

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**Category to Number**

Graphical user interface

Description automatically generated

**Color Manager:**

Graphical user interface

Description automatically generated

**Table

Description automatically generatedPartitioning**:

Graphical user interface, text, application

Description automatically generated

**Graphical user interface

Description automatically generatedDecision tree learner**:

**Graphical user interface, text, application, email

Description automatically generatedDecision tree predictor**

**Scorer**

Graphical user interface, text, application, email

Description automatically generated

**Confusion Matrix**

Table

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Diagram

Description automatically generated

**HeatMap**

Graphical user interface, application

Description automatically generated

Chart

Description automatically generated

**Graphical user interface, text, application

Description automatically generatedStatistics**

A screenshot of a computer

Description automatically generated with medium confidence

**Chart, bar chart

Description automatically generatedBar Chart**

Graphical user interface, application

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