**Final Year B. Tech. (CSE) – I : 2021-22**

**4CS462 : PE2 - Data Mining Lab**

**Assignment No. 5**

**Group id: DM21G12**

**Group members:**

**Abhishek More(2018BTECS00037)**

**Sushil Wagh(2018BTECS00031)**

**Title :** Design the rule based classifier : Extract the rules from decision tree build in

assignment no. 4.

**Objective/Aim :**

Tabulate the results and evaluate the performance of rules generated using

following metrics :

a. Coverage

b. Accuracy

C. Toughness (size)

Use the following categorical data sets from UCI machine learning repository :

a. Balance Scale data set

b. Car evaluation data set

C. Breast-cancer data se

**Introduction:**

**Coverage of a rule:**

The percentage of instances that satisfy the antecedent of a

rule (i.e., whose attribute values hold true for the rule’s

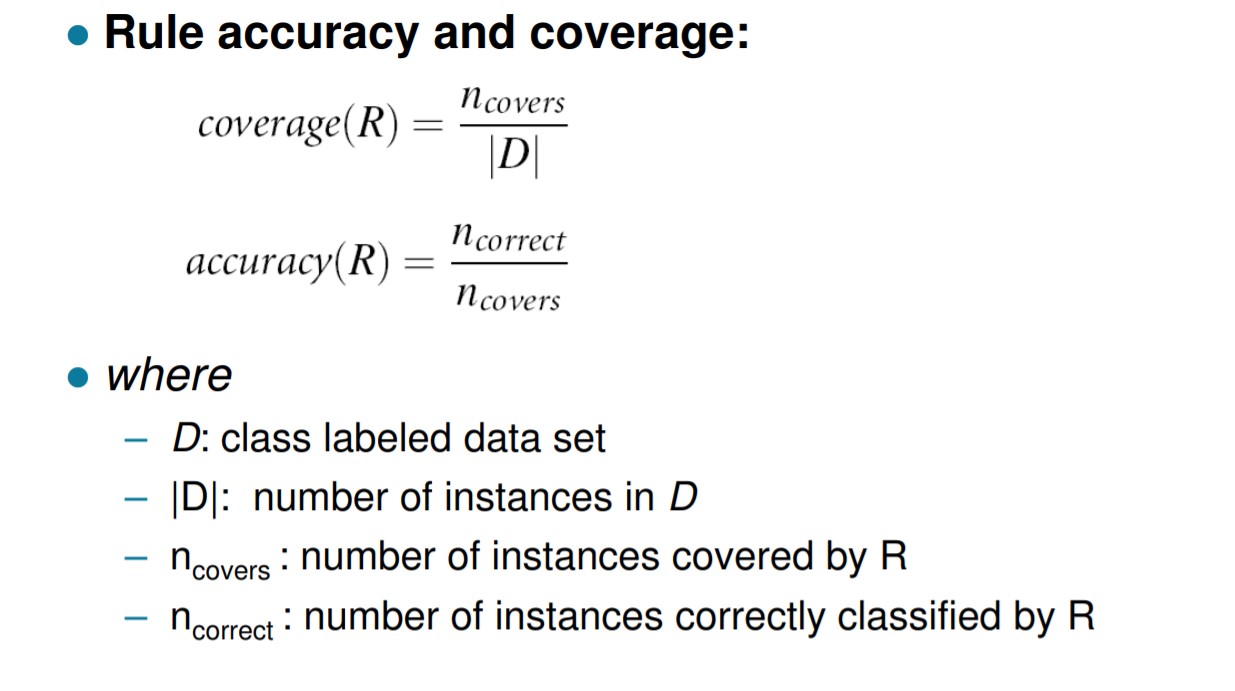
antecedent).

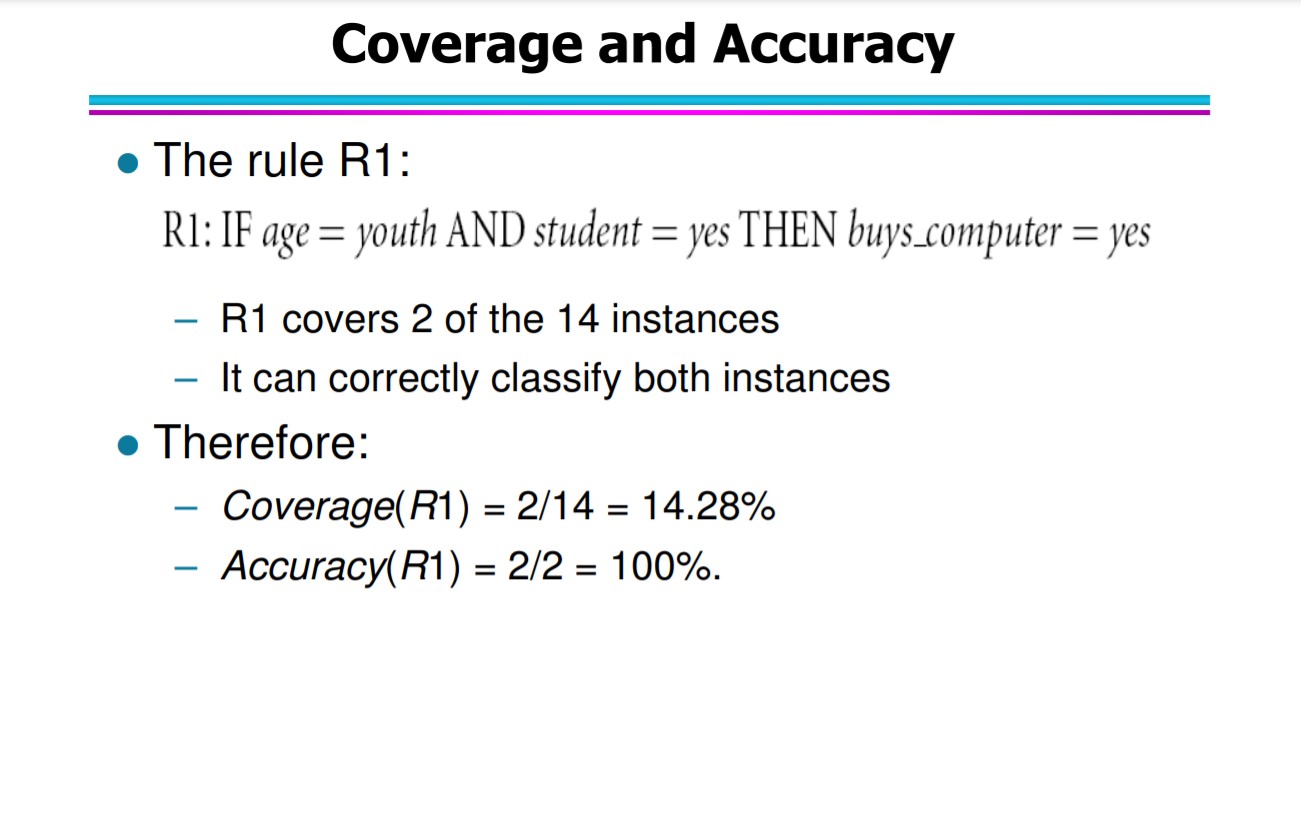
**Accuracy of a rule:**

Rule-Based Classification

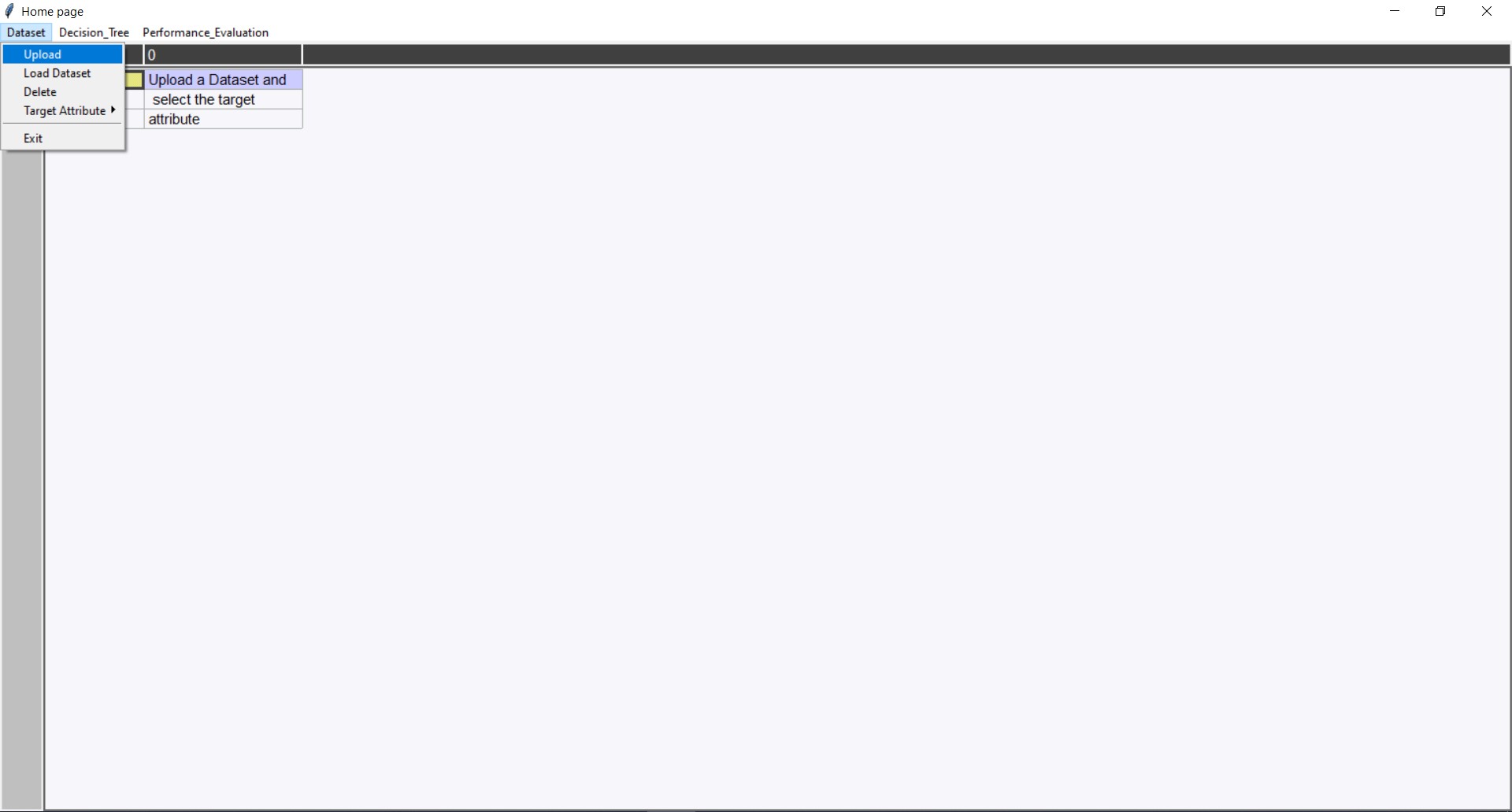
The percentage of instances that satisfy both the antecedent

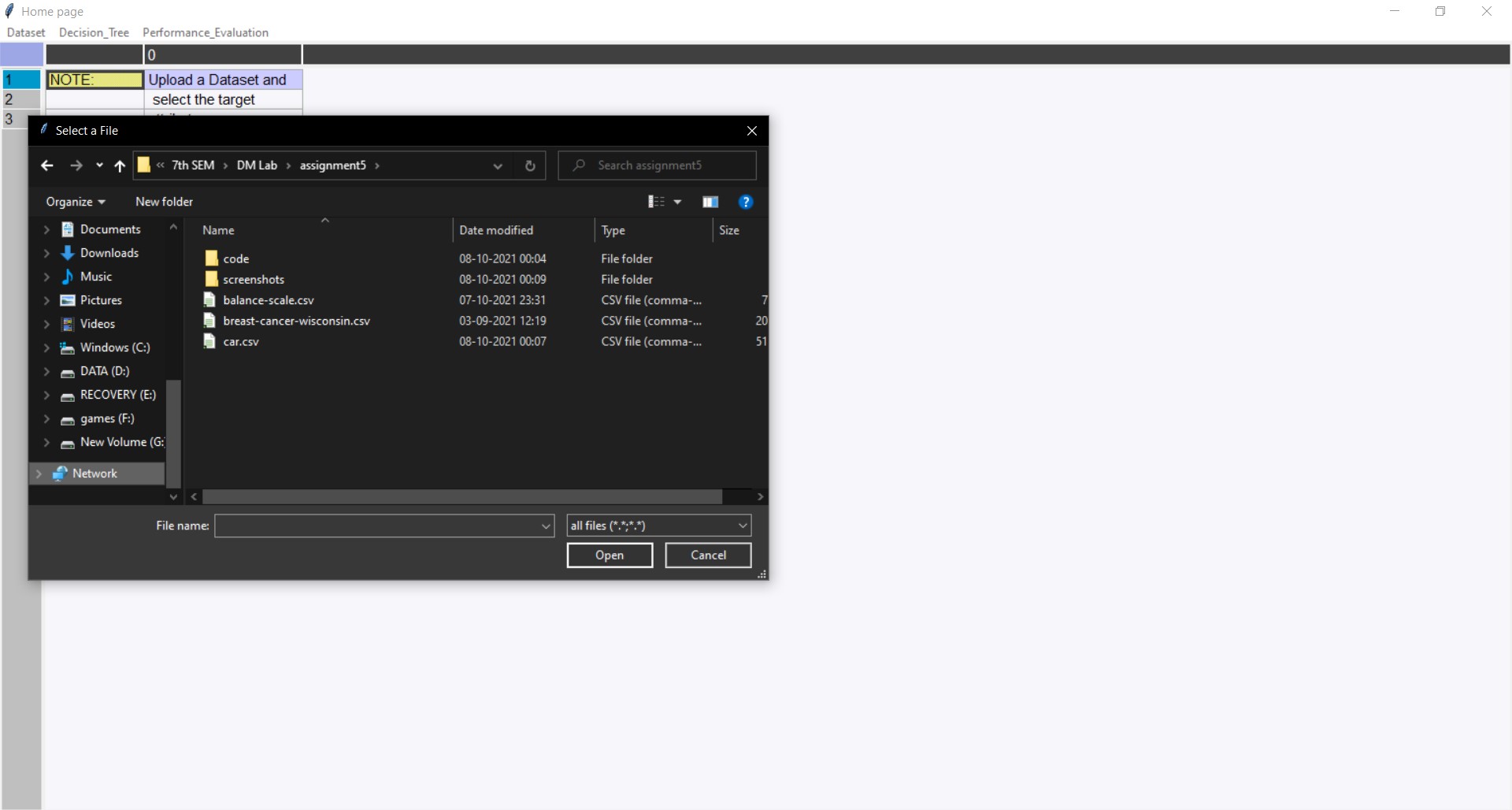
and consequent of a rule

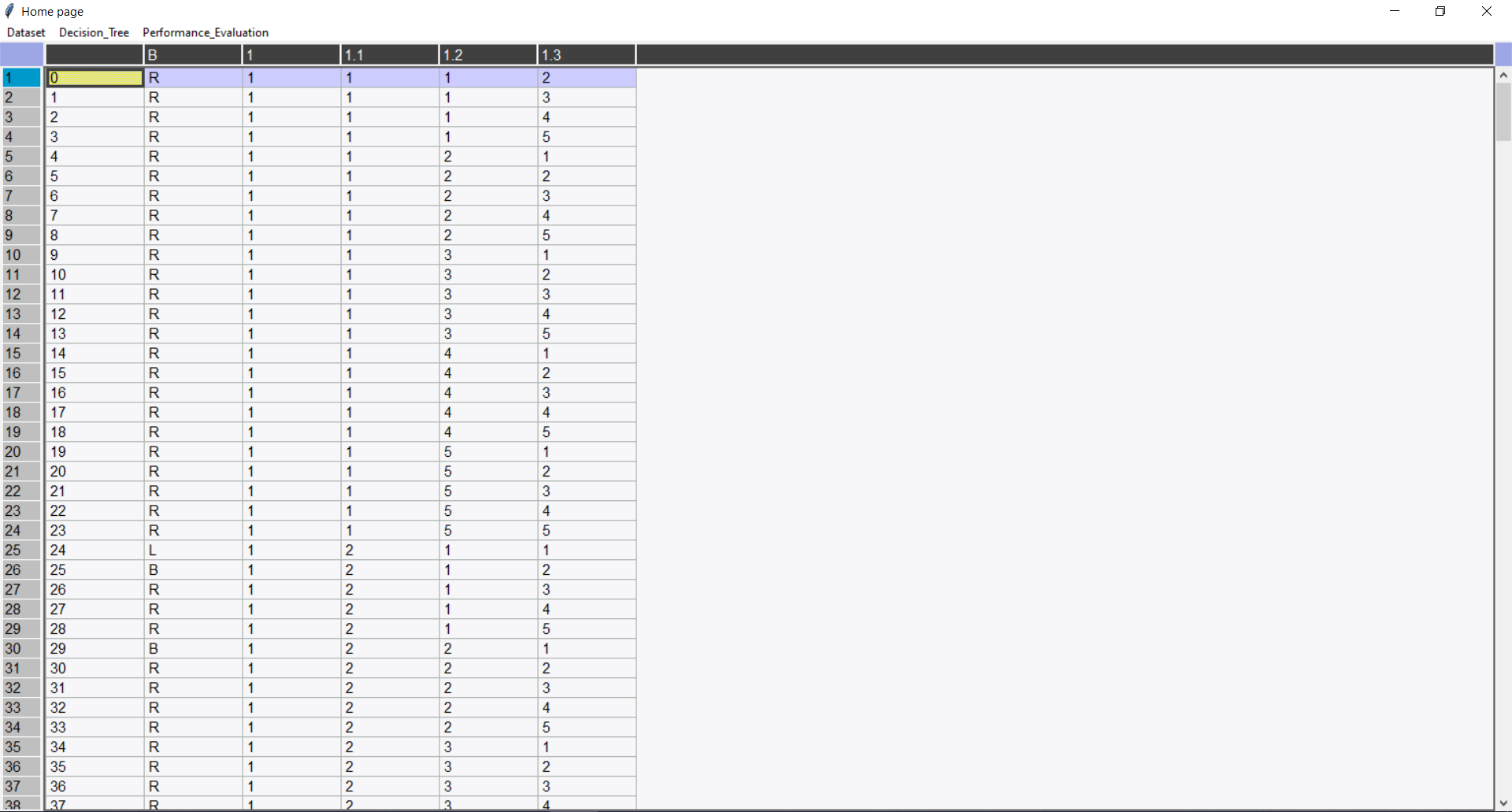


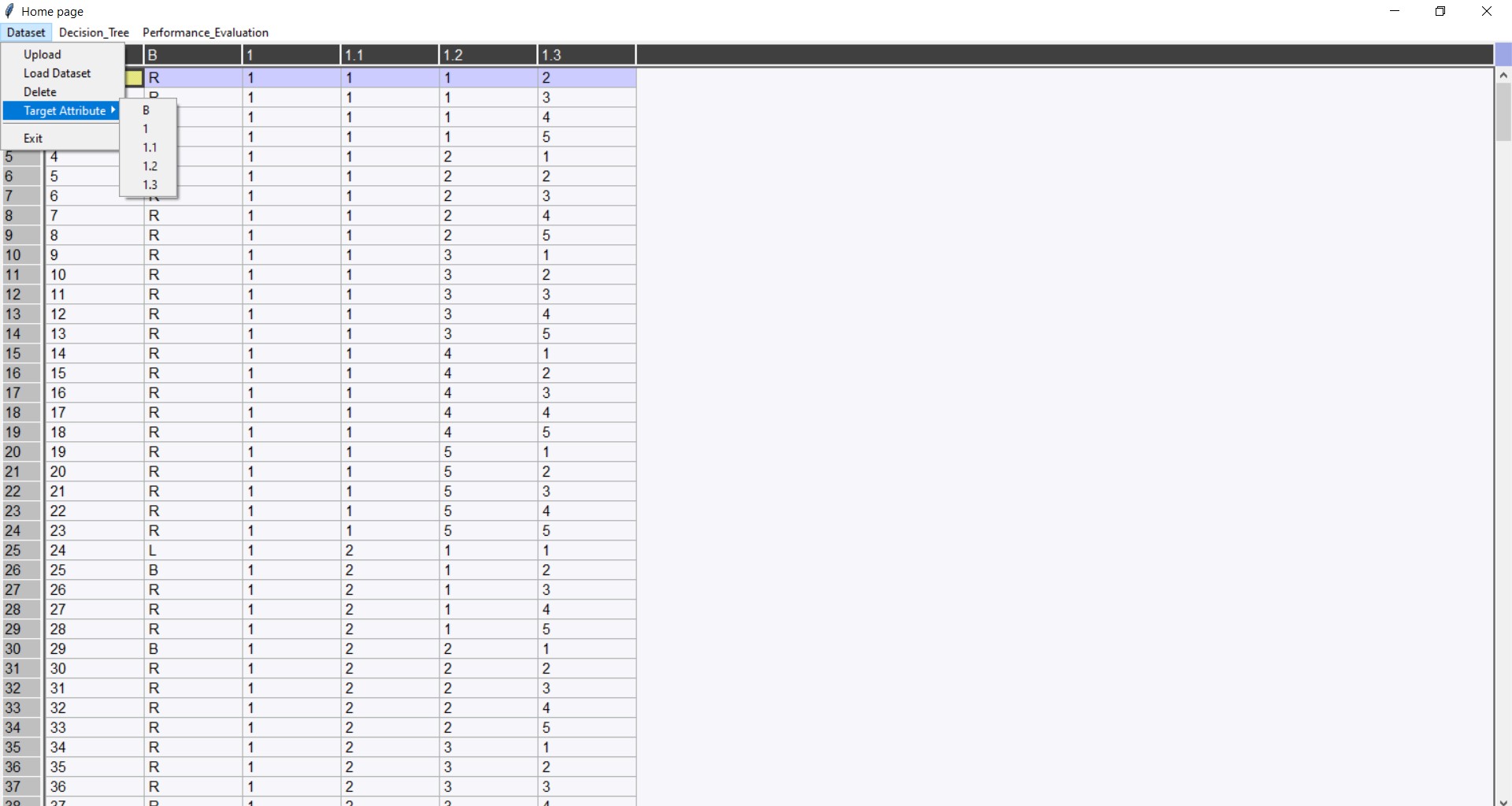


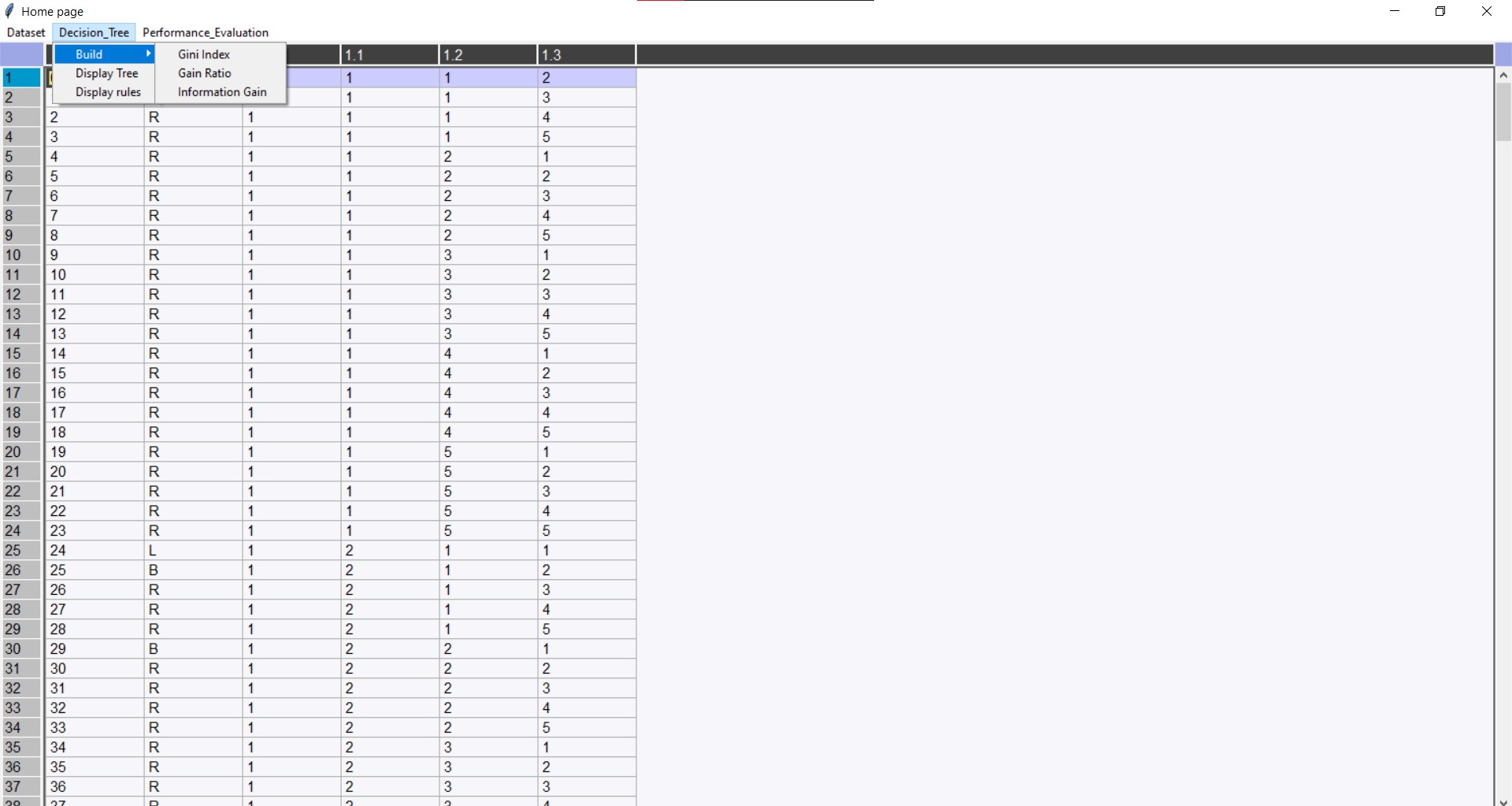
**Result/Observations/Screenshots:**

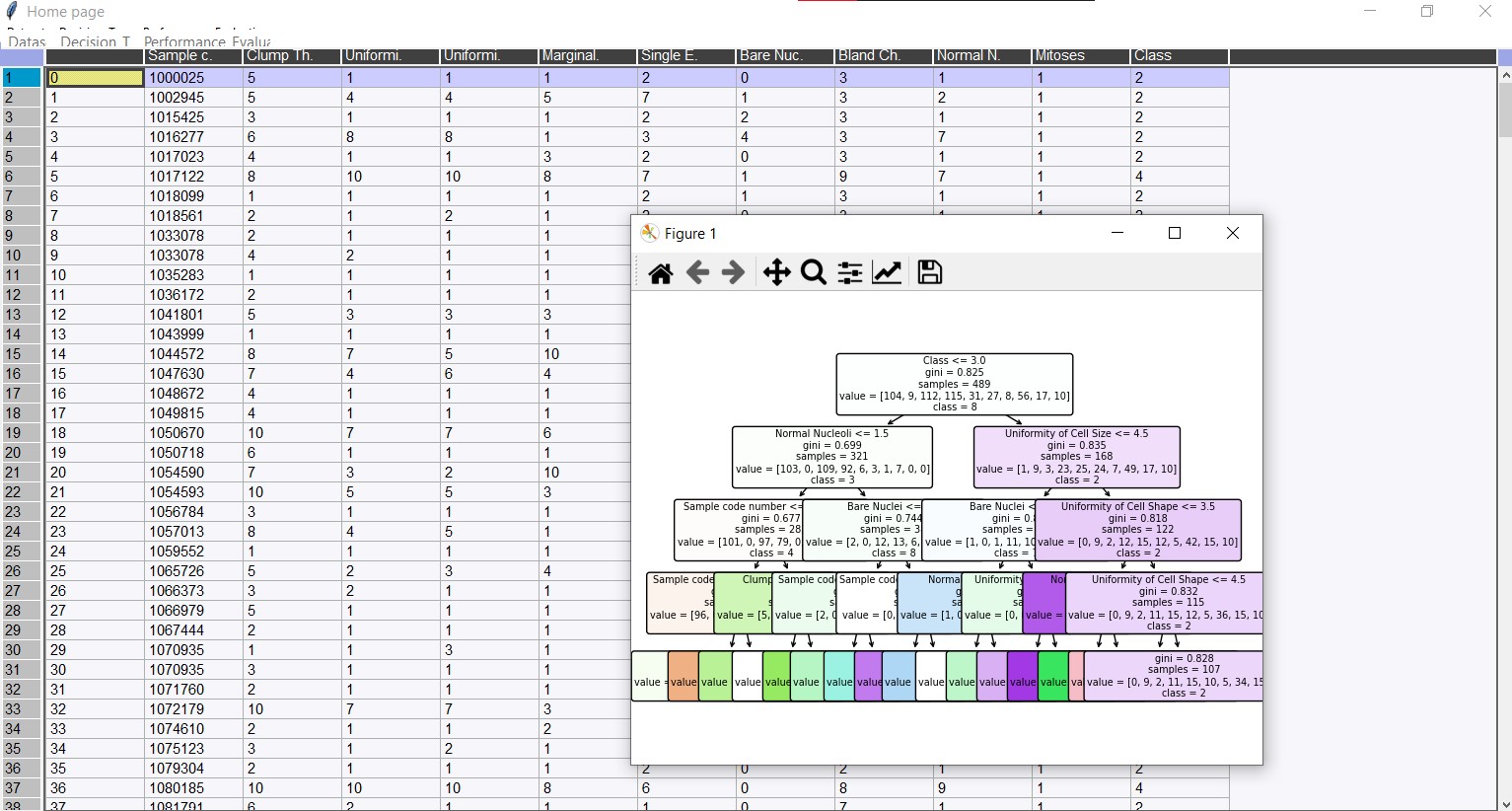
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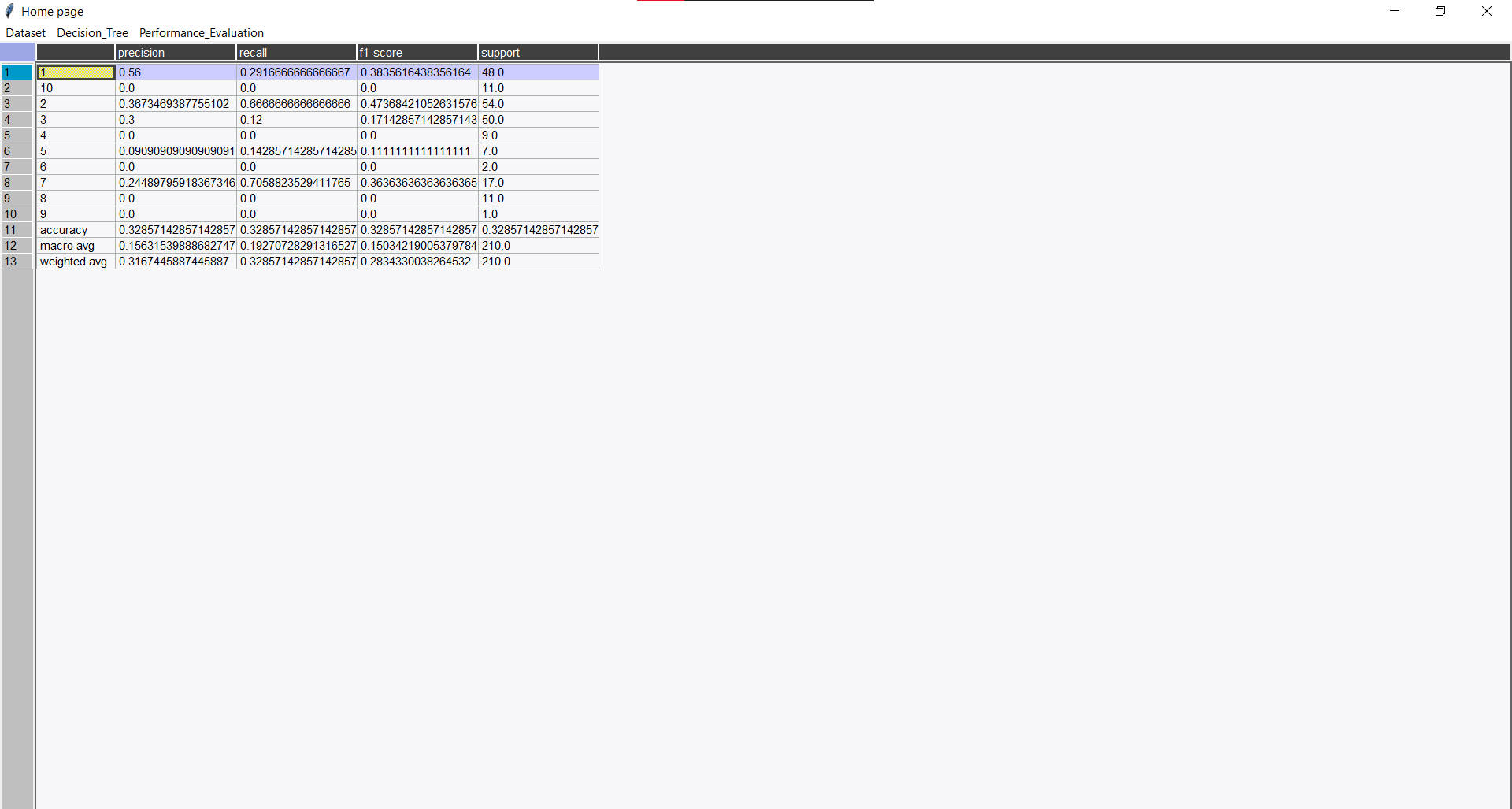
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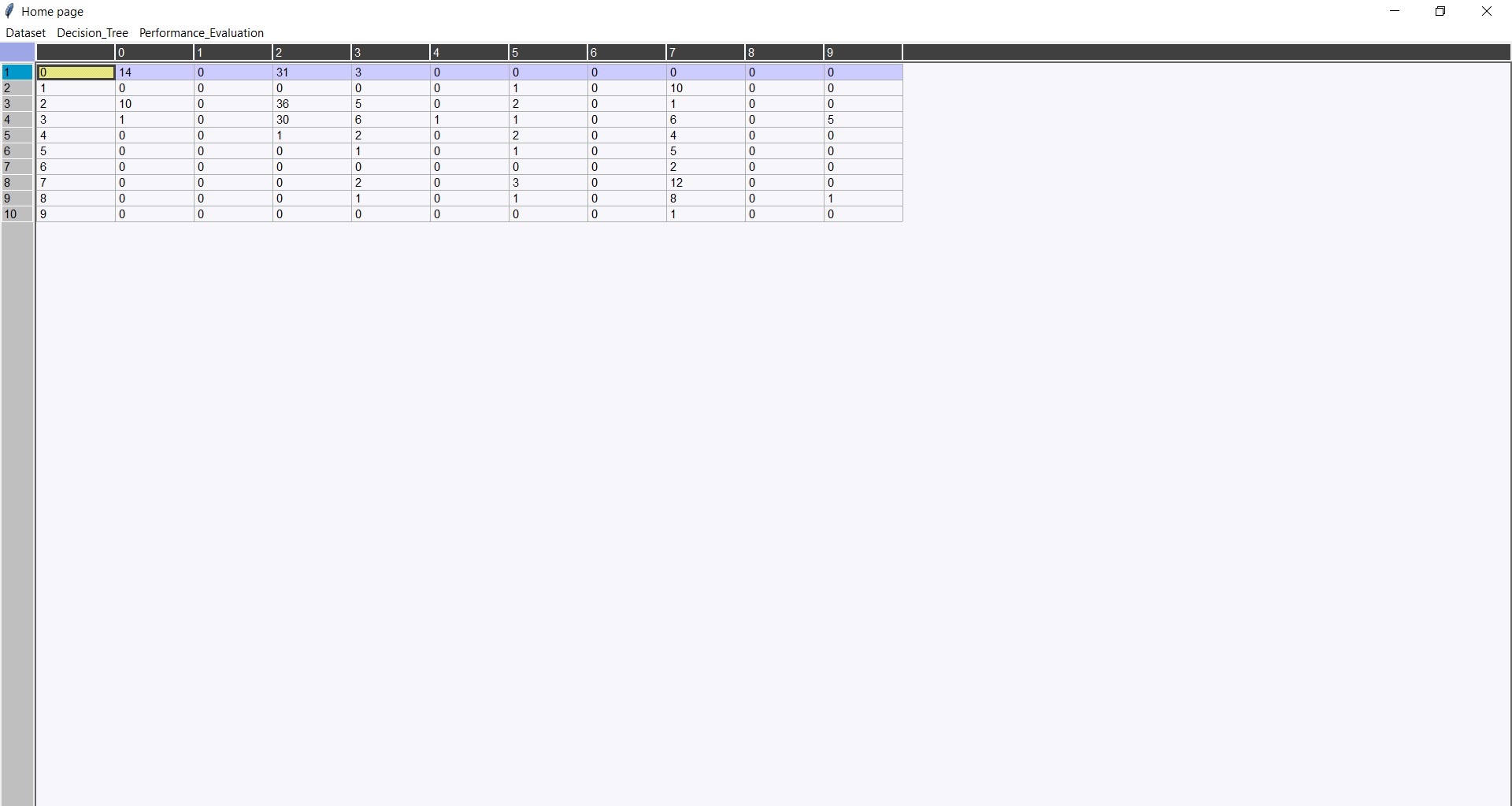
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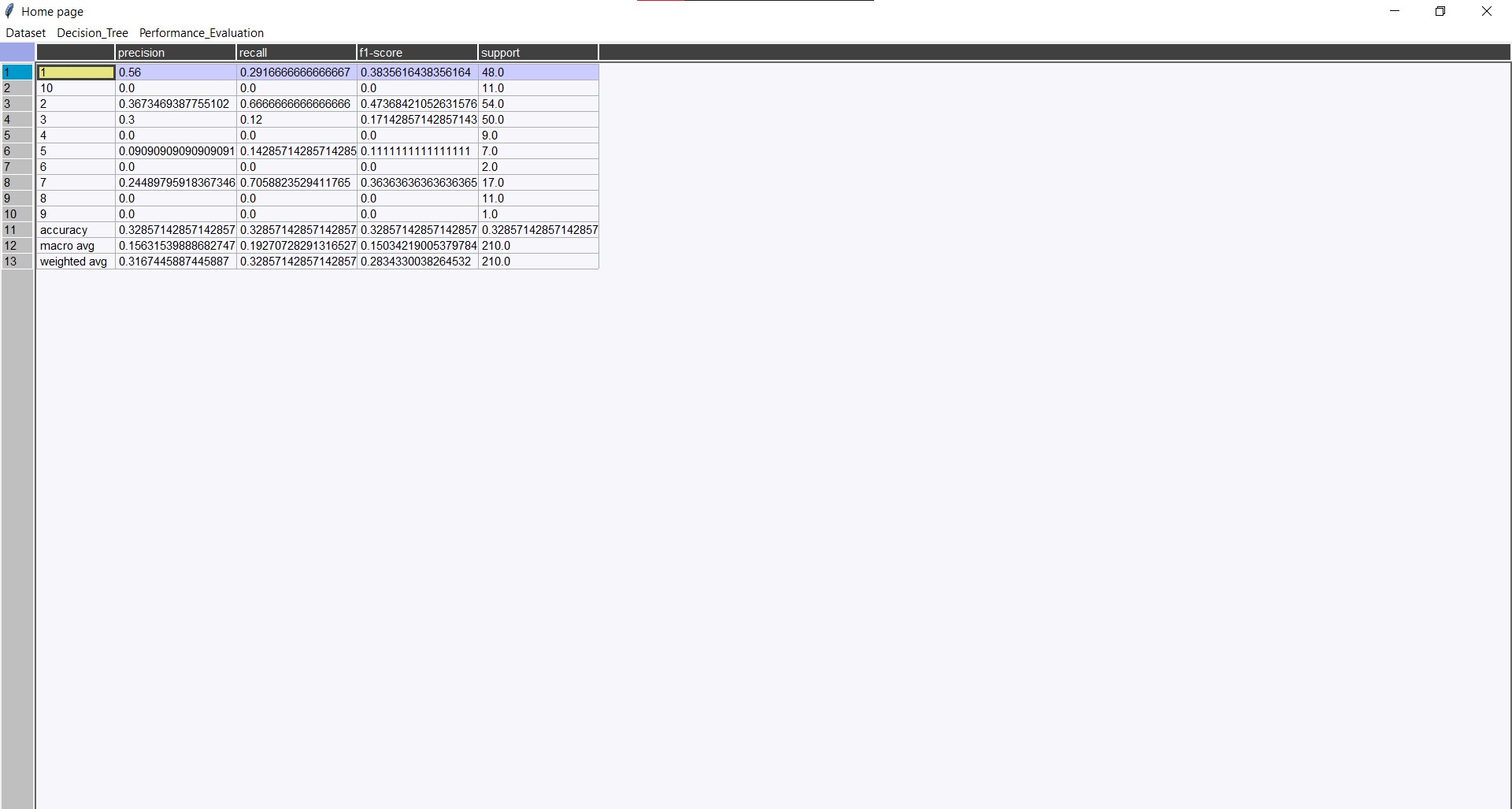
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**References:**

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