

Task 2-1

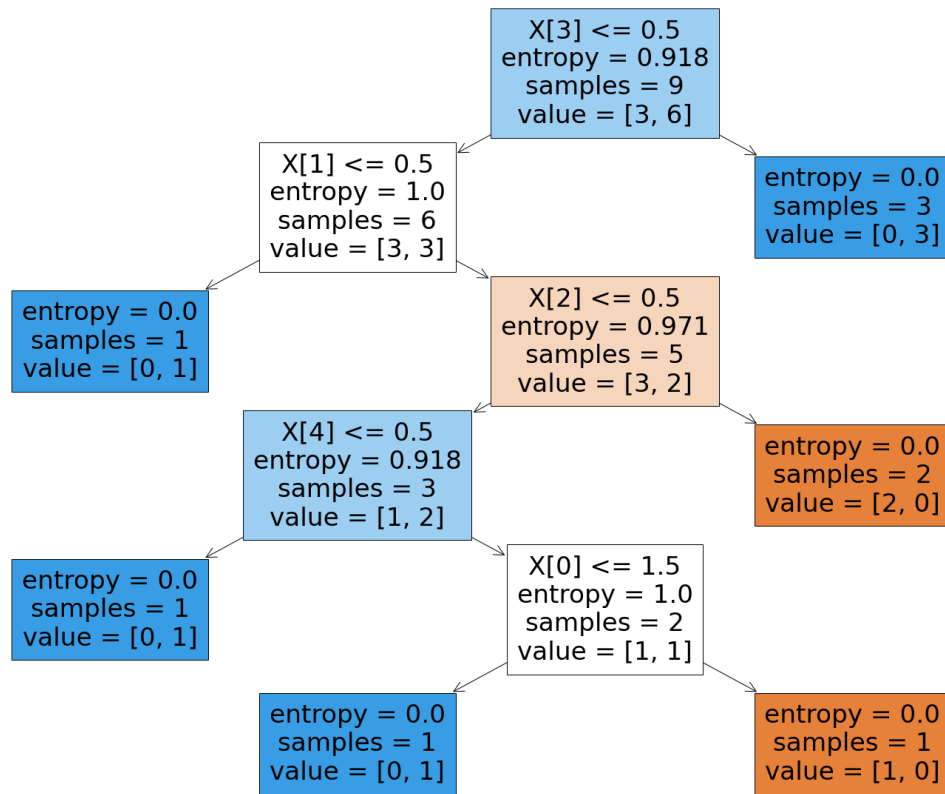


Figure 1: Snapshot of Decision Tree

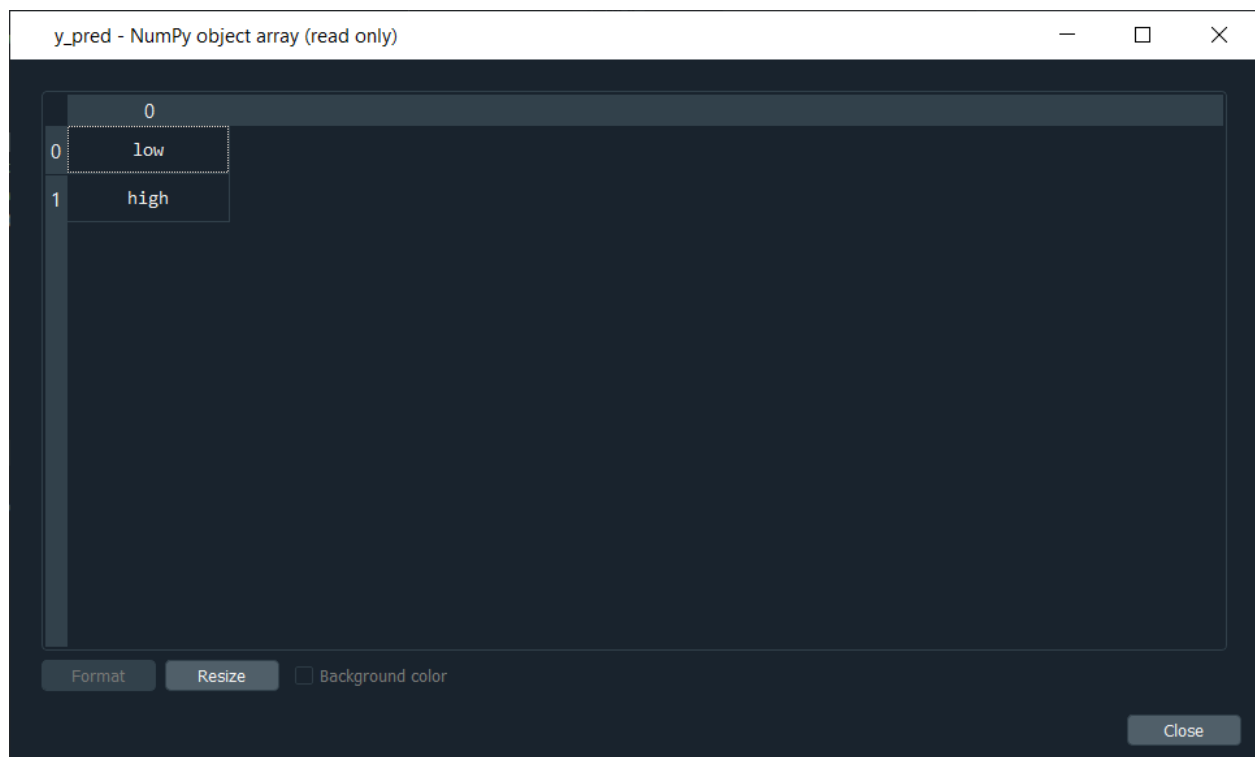


Figure 2: Predicted Credit Risk of Tom & Ana

Task 2-2

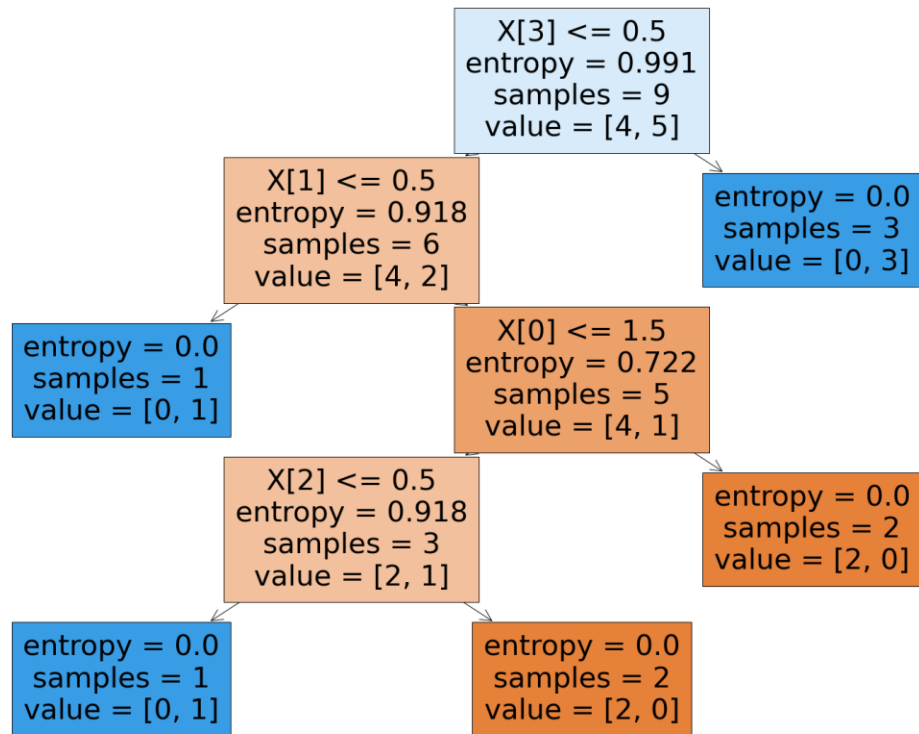


Figure 3: Decision Tree after Sofia's credit is high

- After Sofia's credit risk is changed to high, the depth of the decision tree further reduces. Also in case of Task 2-1, the entropy of the decision tree is close to "1" throughout, while after changing Sofia's credit risk to high, the entropy is high initially and then comes down to 0.722 and then increases to 0.918

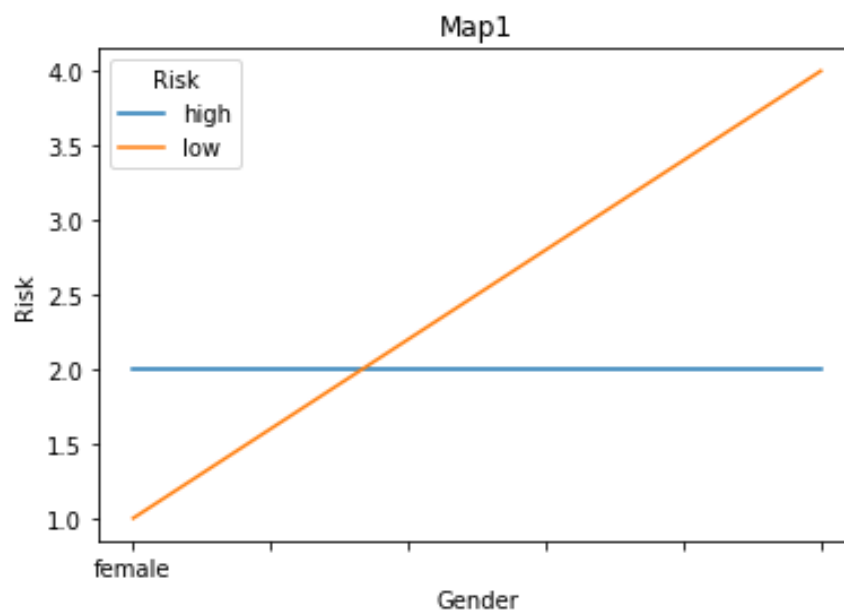


Figure 4: Mapping Gender attribute with Risk column

- Gender attribute does not play a role in the Decision Tree