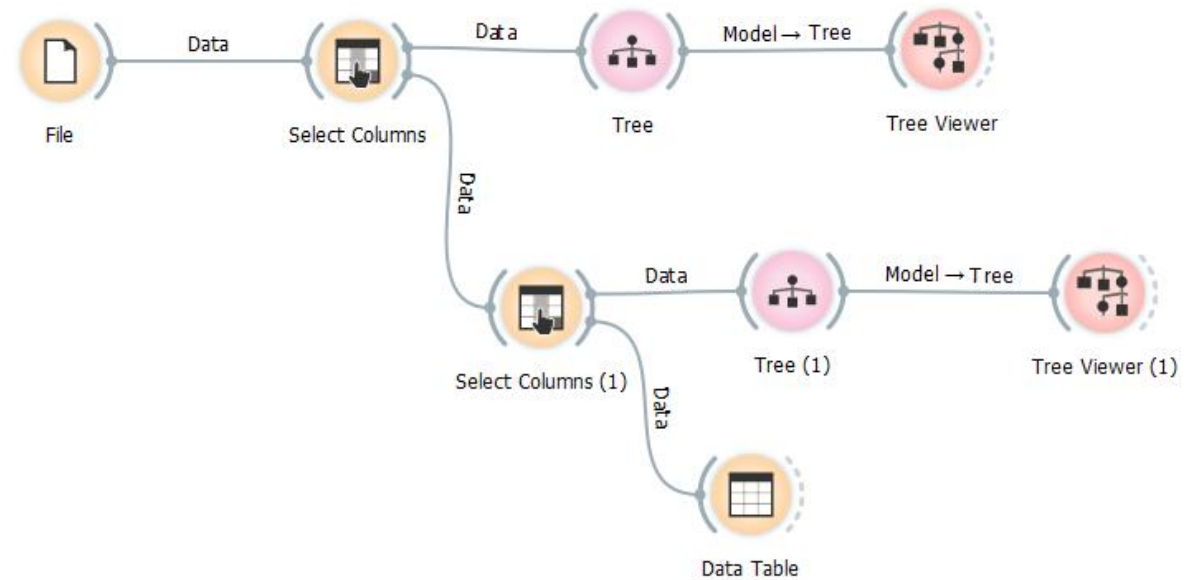# Homework

Assignment 1

1. Sketch the real decision tree model behind the data of the XOR example.

2. What happens if we remove the attribute "C"? Guess first, then use an Orange workflow and find out.

A	B	C	AxorB
1	1	1	0
1	1	1	0
1	0	1	1
1	0	0	1
0	1	0	1
0	1	0	1
0	0	1	0
0	0	0	0

Assignment 2: Questions

1. What do we get when testing on the training set?

2. Can we always get a 100% accuracy on the training set?

3. When do we use "leave-one-out"?

4. What is stratified sampling?

5. When is classification accuracy "good"?

Assignment 3: Compute the precision, recall and F1 for both classifiers for the class Fraud

Two confusion matrices for two classifiers

		Predicted		
		Fraud	Not Fraud	
Actual	Fraud	0	4	4
	Not fraud	0	9996	9996
		0	10000	

		Predicted		
		Fraud	Not Fraud	
Actual	Fraud	4	0	4
	Not fraud	300	9696	9996
		304	9696	

For the class *Fraud*

- Precision=

- Recall=

- F1=

- Precision=

- Recall=

- F1=