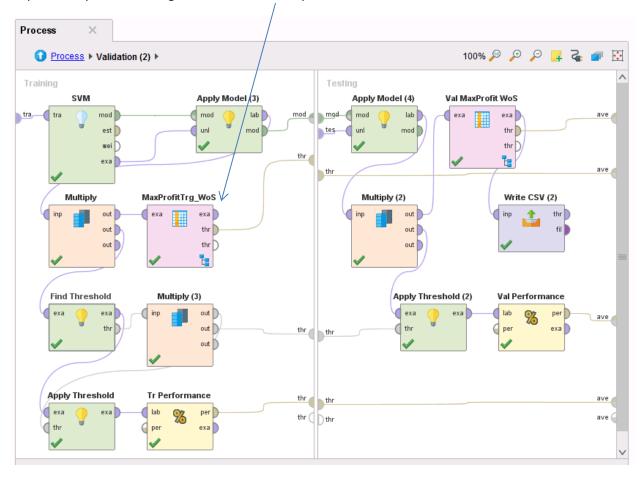
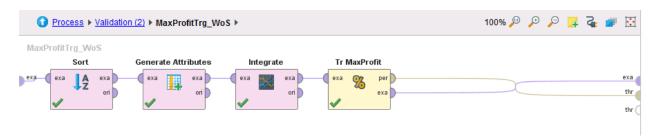
RapidMiner process – Assignment 3, maxProfit operator



**The maxProfit operator** helps to determine the maximum net profit for any model (without having to export the model scores to calculate this in Excel).

The calculation of max-profit can be conveniently packages inside a Operate on Subset operator. Steps are:

- 1. Sort the data on confidence(1) values
- 2. Generate a profit attribute. If the case is an actual donor, profit is \$12.32, else it is -0.68. (Need to use scaled values to reflect profit for original data with 5.1% donors. Values given in the process are not the accurate ones, you need to determine the scaled profit values to use).
- 3. Get the cumulative profit.
- 4. Get the maximum value of the cumulative profit.



The process above also shows a FindThreshold operator – to find the best threshold to minimize misclassification costs. This is based on costs for misclassifying a non-donor/donor. To get misclassification-cost values reflecting the 5.1 % donor rate in the original data, we should scale the \$12.32 and \$0.68 values for donors and non-donors.

