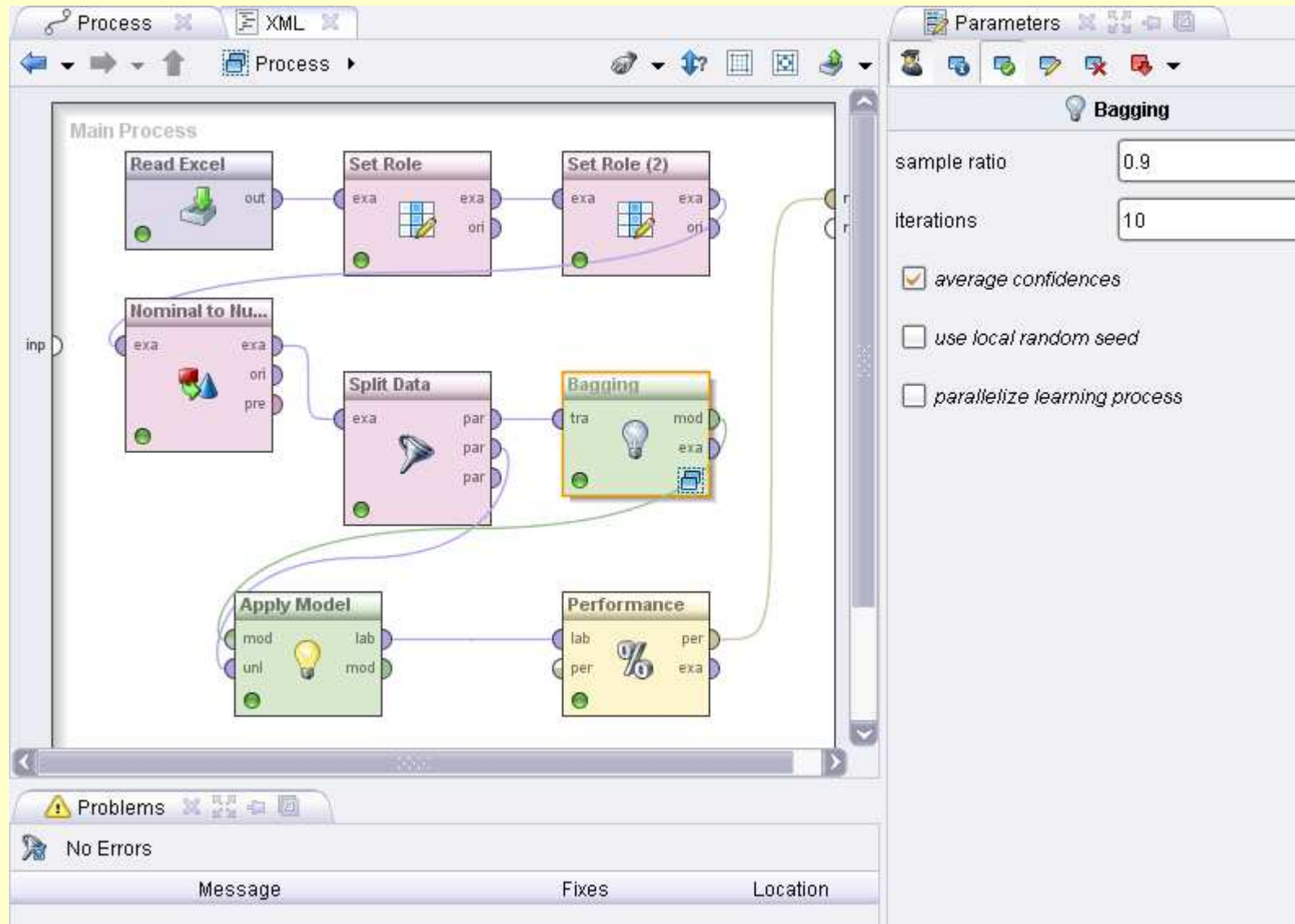


Week 11

Classification evaluation in Rapidminer

- **Dataset:** risk
week 11 – datasets.xls
- **Algorithms:** ensemble methods

Bagging - Neural Network



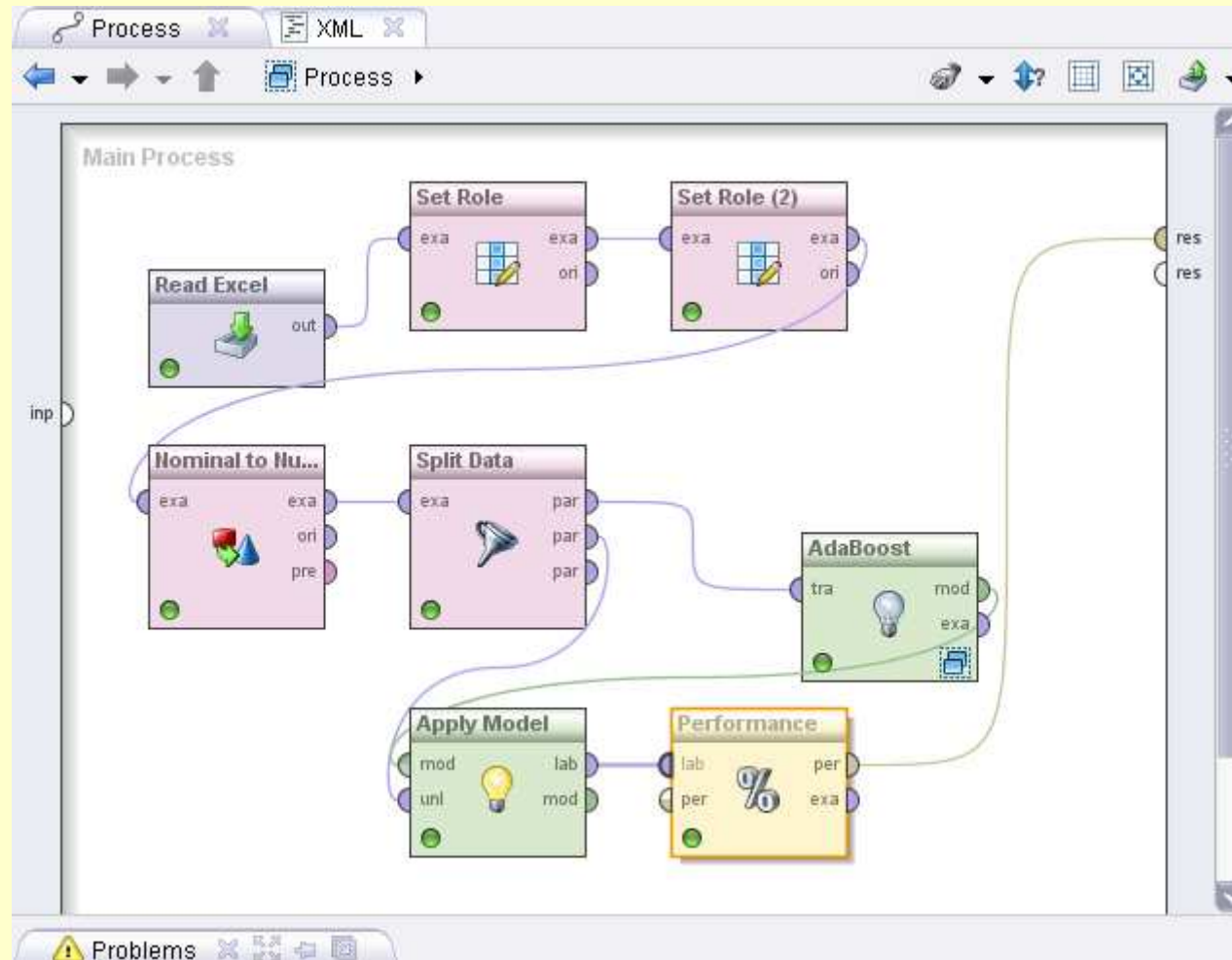
Bagging - Neural Network

accuracy: 75.30%				
	true good risk	true bad loss	true bad profit	class precision
pred. good risk	170	27	43	70.83%
pred. bad loss	14	117	33	71.34%
pred. bad profit	69	119	643	77.38%
class recall	67.19%	44.49%	89.43%	

Bagging – Decision Tree

accuracy: 73.93%				
	true good risk	true bad loss	true bad profit	class precision
pred. good risk	144	27	39	68.57%
pred. bad loss	5	101	12	85.59%
pred. bad profit	104	135	668	73.65%
class recall	56.92%	38.40%	92.91%	

Bagging - Neural Network



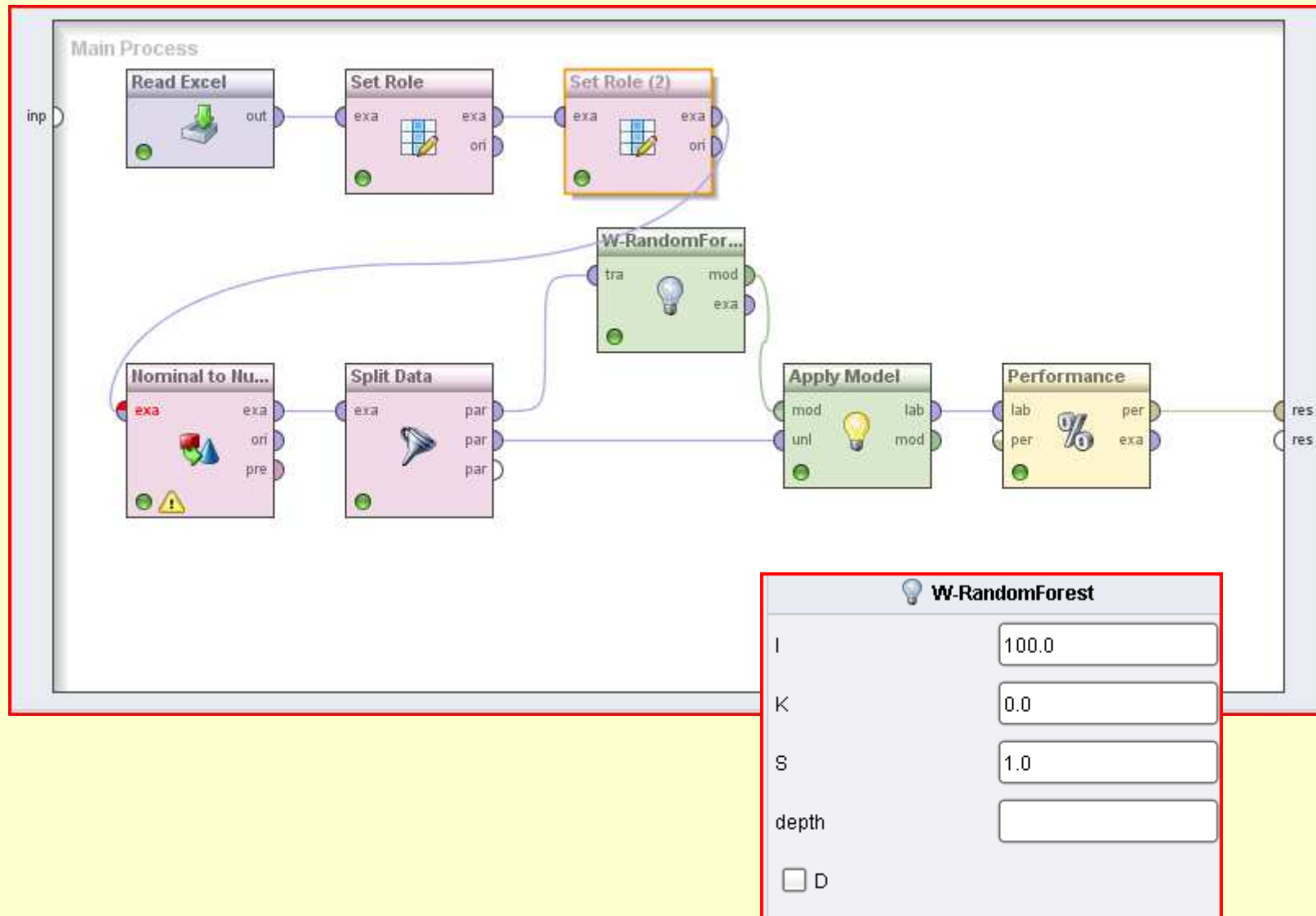
Boosting - Neural Network

accuracy: 75.30%				
	true good risk	true bad loss	true bad profit	class precision
pred. good risk	169	32	46	68.42%
pred. bad loss	12	108	20	77.14%
pred. bad profit	72	123	653	77.00%
class recall	66.80%	41.06%	90.82%	

Boosting – Decision Tree

accuracy: 75.79%				
	true good risk	true bad loss	true bad profit	class precision
pred. good risk	171	27	43	70.95%
pred. bad loss	5	101	12	85.59%
pred. bad profit	77	135	664	75.80%
class recall	67.59%	38.40%	92.35%	

Random forest

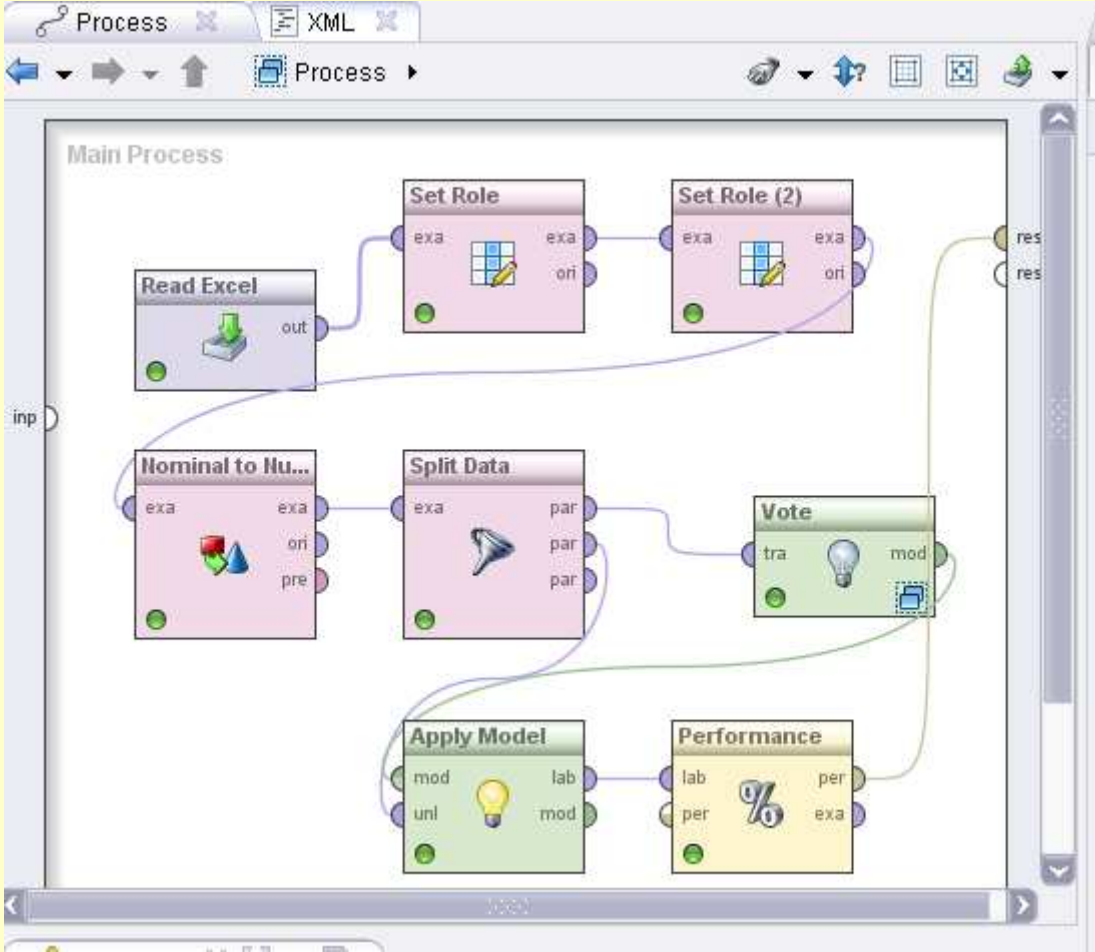


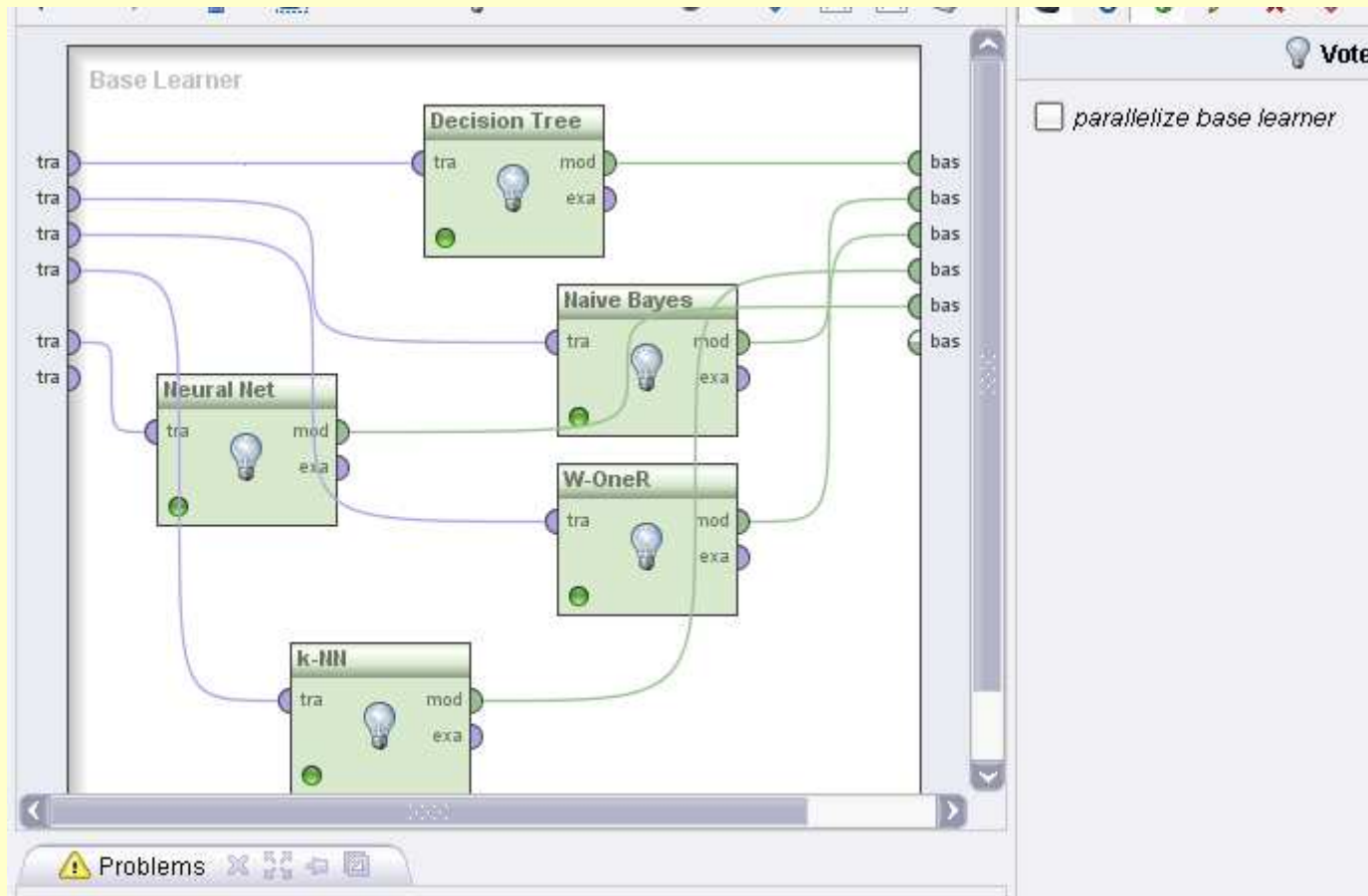
Random forest

accuracy: 73.20%

	true good risk	true bad loss	true bad profit	class precision
pred. good risk	153	33	45	66.23%
pred. bad loss	39	126	49	58.88%
pred. bad profit	61	104	625	79.11%
class recall	60.47%	47.91%	86.93%	

majority vote for several classifiers





accuracy: 74.09%

	true good risk	true bad loss	true bad profit	class precision
pred. good risk	172	33	48	67.98%
pred. bad loss	21	121	49	63.35%
pred. bad profit	60	109	622	78.63%
class recall	67.98%	46.01%	86.51%	