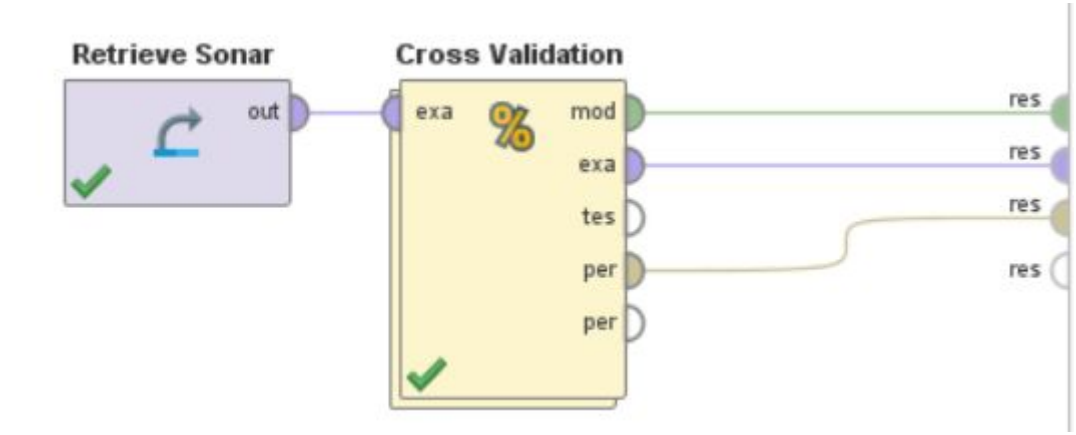
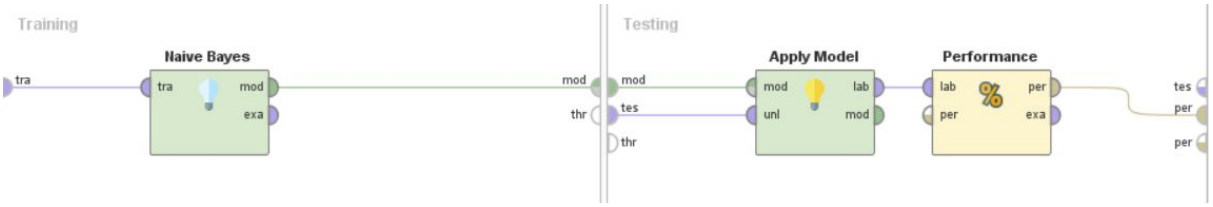
TA10 - Enzo Cozza - Agustín Fernández

Ejercicio 1

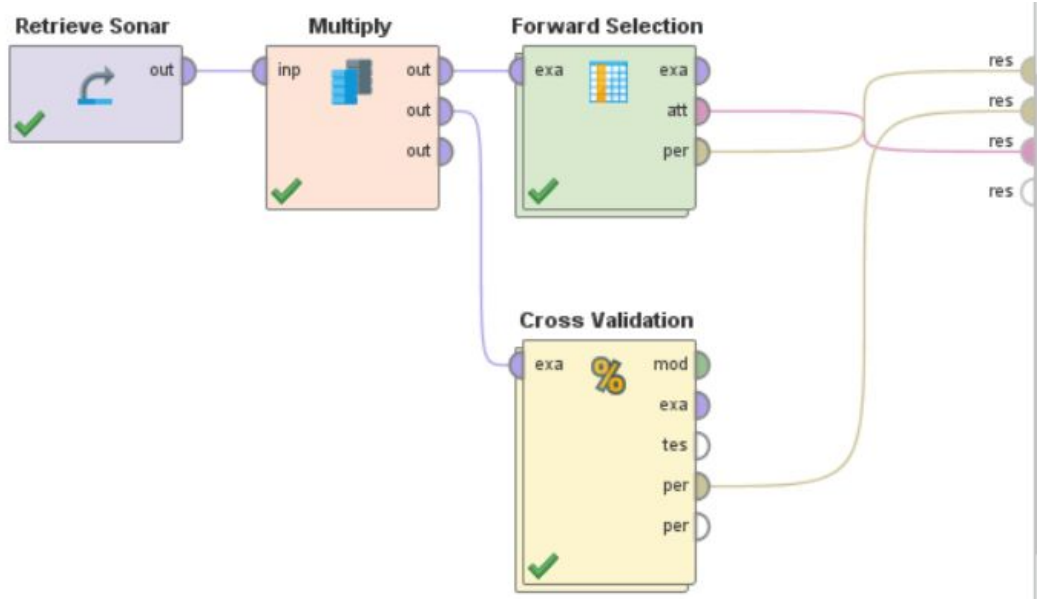




accuracy: 67.83% +/- 6.92% (micro average: 67.79%)

	true Rock	true Mine	class precision
pred. Rock	76	46	62.30%
pred. Mine	21	65	75.58%
class recall	78.35%	58.56%	

Ejercicio 2



Se seleccionaron 4 atributos:

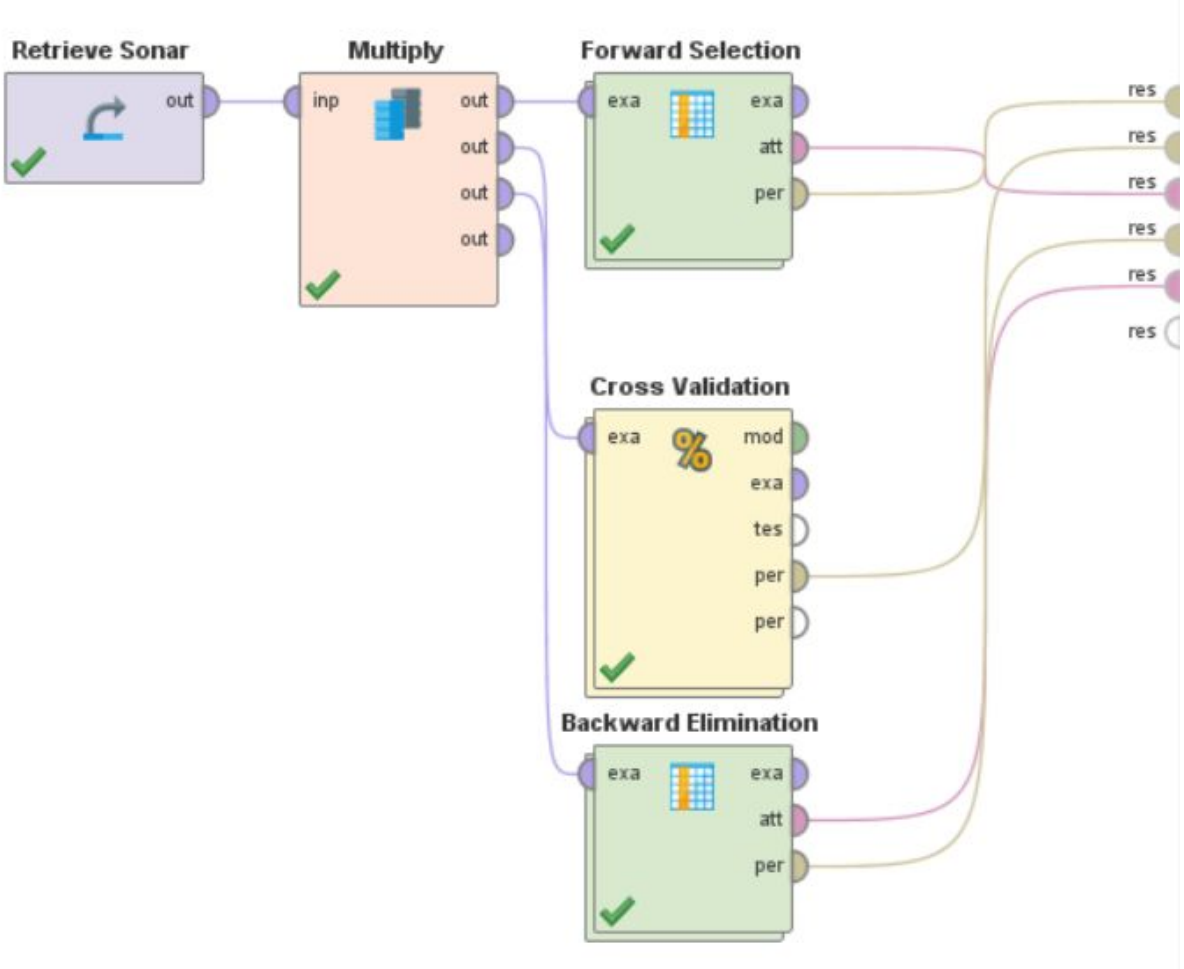
attribute	weight ↓
attribute_12	1
attribute_15	1
attribute_17	1
attribute_18	1

accuracy: 77.43% +/- 2.95% (micro average: 77.40%)

	true Rock	true Mine	class precision
pred. Rock	67	17	79.76%
pred. Mine	30	94	75.81%
class recall	69.07%	84.68%	

Ejercicio 3

Se modificaron los parámetros: speculative rounds=1; maximal number of eliminations=20.



Se seleccionaron 50 atributos, de los cuales no fueron seleccionados: el 3, 7, 14, 20, 36, 41, 47, 48, 52 y 59.

accuracy: 73.60% +/- 5.92% (micro average: 73.56%)

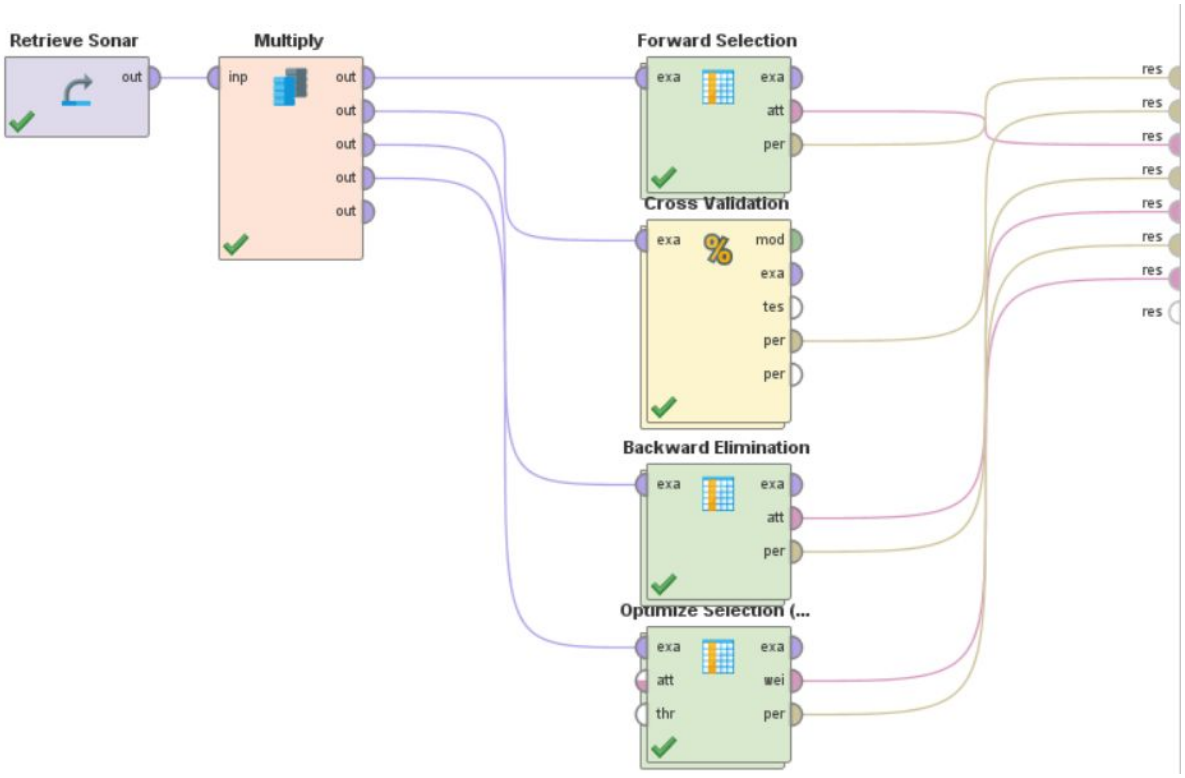
	true Rock	true Mine	class precision
pred. Rock	83	41	66.94%
pred. Mine	14	70	83.33%
class recall	85.57%	63.06%	

Se puede observar que si bien la diferencia en la precisión es escasa, se obtuvo mayor exactitud al tratar con Forward Selection. Dejando atrás a la forma original (sin Feature Selection) y Backward Elimination.

Ejercicio 4

Atributos de Optimize Selection (Evolutionary):

use exact number of attributes, restrict maximum, min number of attributes, population size, maximum number of generations, use early stopping, normalize weights, use local random seed, user result individual selection, show population plotter, population criteria data file, maximal fitness, selection scheme, tournament size, dynamic selection pressure, keep best individual, save intermediate weights, p initialize, p mutation, p crossover, crossover type.



Se seleccionaron 28 atributos: 1, 4, 6, 11, 12, 15, 16, 17, 21, 24, 26, 27, 30, 31, 33, 34, 36, 38, 39, 40, 42, 43, 45, 48, 49, 54, 55 y 57.

accuracy: 77.44% +/- 5.82% (micro average: 77.40%)

	true Rock	true Mine	class precision
pred. Rock	84	34	71.19%
pred. Mine	13	77	85.56%
class recall	86.60%	69.37%	

Se obtuvo una precisión apenas mayor (en el entorno de las centésimas) a la del ejercicio 2, dada por el operador Forward Selection que utiliza 24 atributos menos que el anterior.