

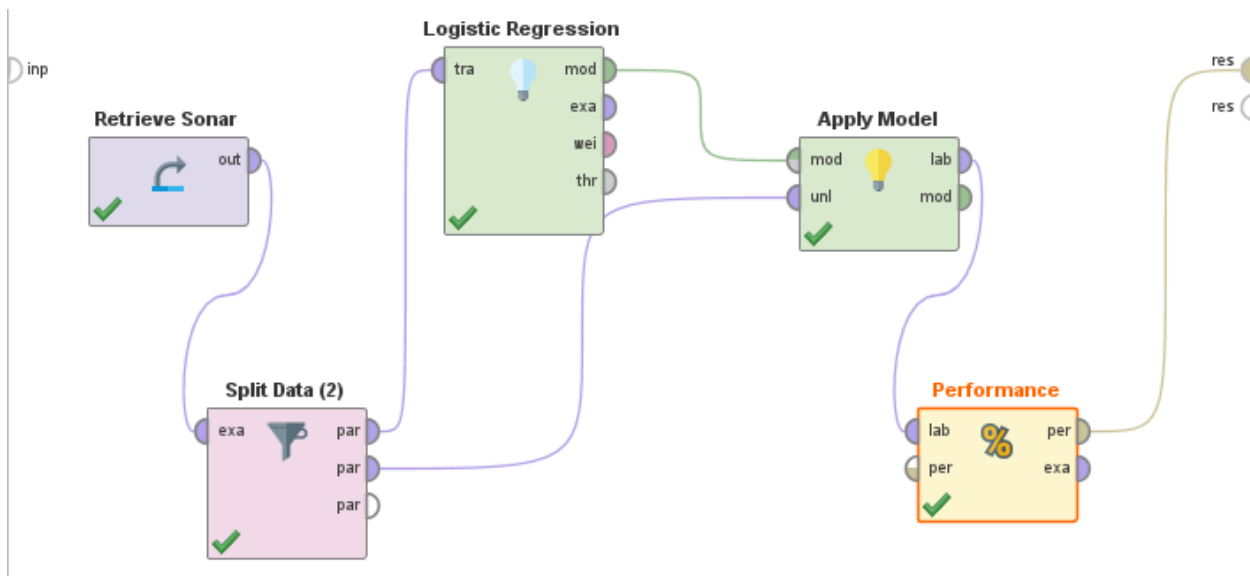
Lab Submission 14

Instructor: Basit Ali

Maimoona Khilji

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1. Use Logistic Regression and build a model using Sonar Dataset.



accuracy: 70.97%

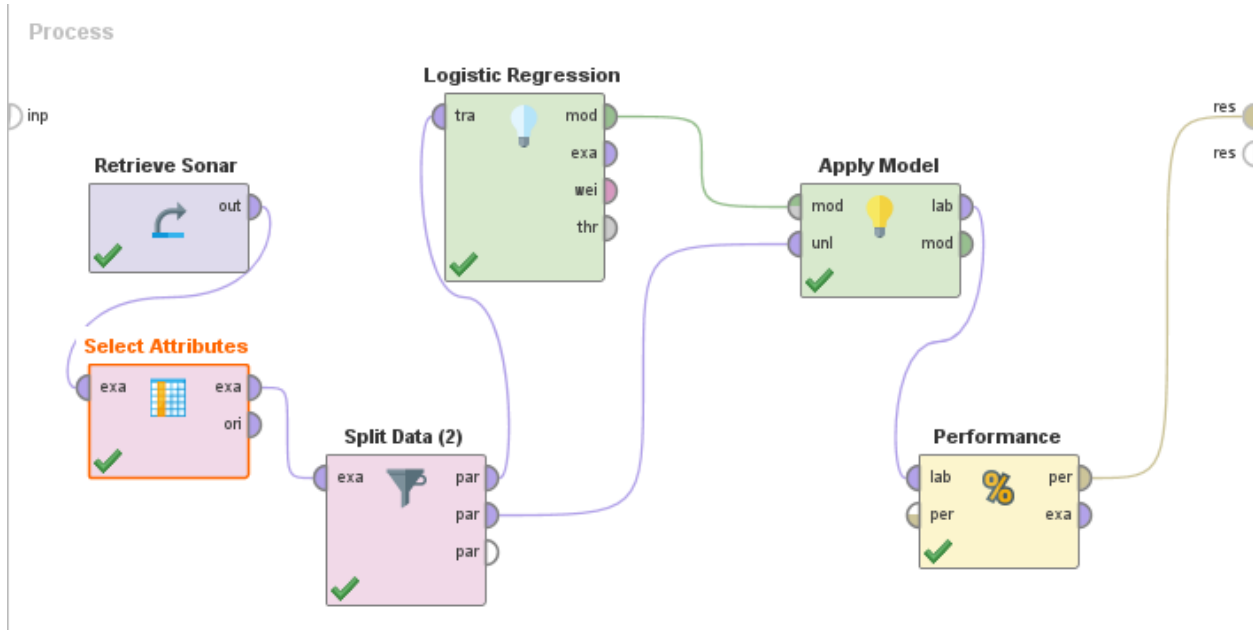
	true Rock	true Mine	class precision
pred. Rock	16	5	76.19%
pred. Mine	13	28	68.29%
class recall	55.17%	84.85%	

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### Semester 6

2. Use single independent variable for prediction and calculate accuracy.



accuracy: 54.84%

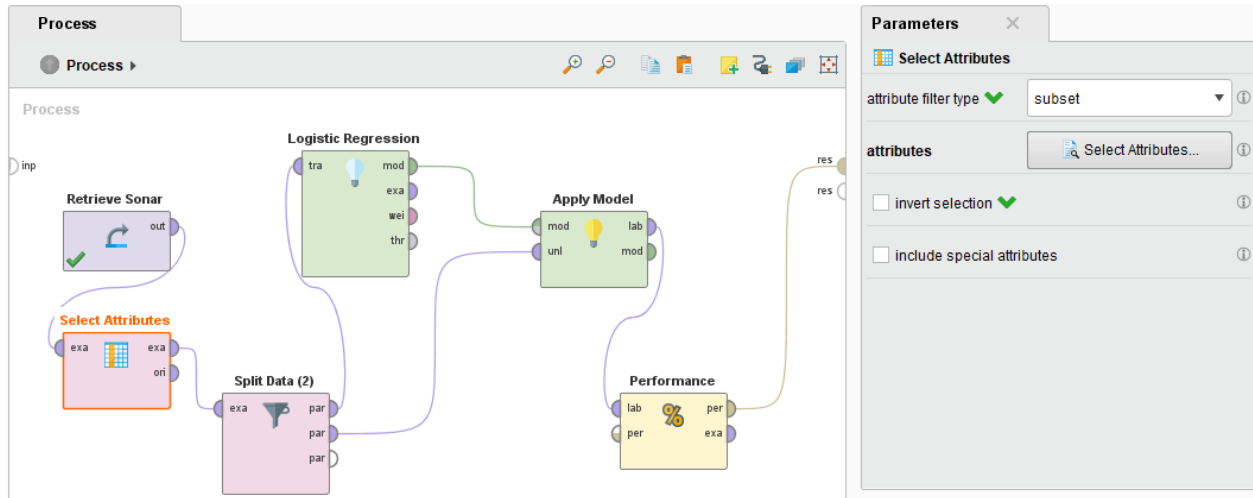
	true Rock	true Mine	class precision
pred. Rock	13	12	52.00%
pred. Mine	16	21	56.76%
class recall	44.83%	63.64%	

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3. Use two independent variables for prediction and calculate accuracy score.



accuracy: 53.23%

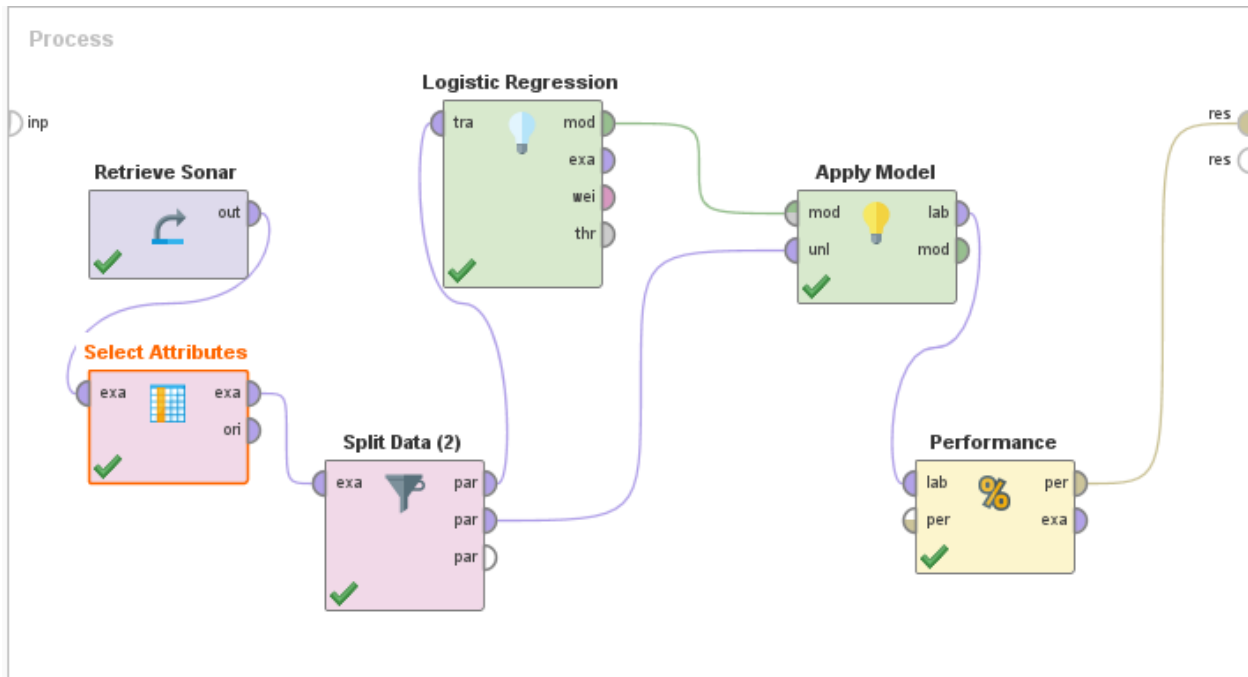
	true Rock	true Mine	class precision
pred. Rock	16	16	50.00%
pred. Mine	13	17	56.67%
class recall	55.17%	51.52%	

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4. Use all the independent variables for prediction and calculate accuracy score.



accuracy: 70.97%

	true Rock	true Mine	class precision
pred. Rock	16	5	76.19%
pred. Mine	13	28	68.29%
class recall	55.17%	84.85%	

5. Which one performs better?

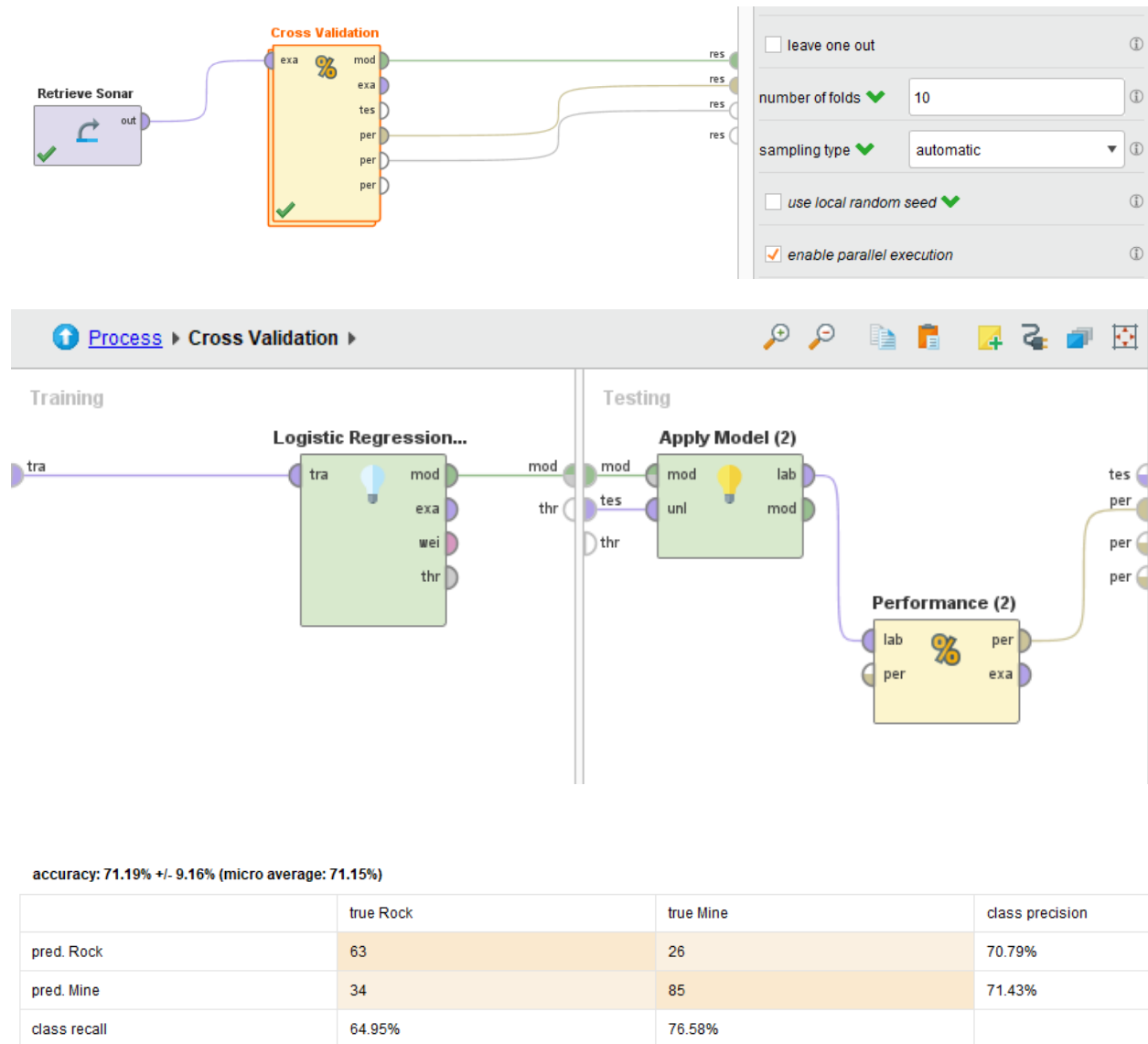
All independent variables perform better than the other conditions.

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#### 6. Use cross validation for the best performed model.



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