

Belief and Decision Network Tool Version 5.1.10 --- Instance.xml

File Edit View Network Options Help

Make Observation Query Plot Query Toggle Monitoring Select View Probability Table View/Modify Decision Add/Remove Nodes Optimize Decisions Independence Quiz

Create Solve

Click on a node to make an observation about its value.

Querying Node Febra

Start by choosing whether or not to prune all irrelevant variables.

Click on a factor to inspect it.

Current Factors:

- f1(Gripe)
- f1(Abces)
- f2(Gripe, Abces, Febra)
- f3(Febra, Obeseala)
- f4(Febra, Anorexia)

Eliminated Factors:

1) Prune Irrelevant Variables:

Yes No

2) Project Observations:

Project Observations

3) Sum Out Variables:

Heuristic: Minimize

Sum Out Next

Automatically Sum Out

Apply Final Factors

Size:

Finalize Final Factor

Close Reset Query Undo Elimination Order

Inspecting Factors

Click on a value to see its derivation or select a new factor to inspect it.

Reorder Variable Columns

Inspecting Factor f4(Febra, Anorexia)

Febra	Anorexia	Value
Da	T	0.5
Da	F	0.5
Nu	T	0.1
Nu	F	0.9

This factor represents $P(\text{Anorexia} \mid \text{Febra})$.

OK

Belief Network Mode

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File Edit View Network Options Help

Make Observation Query P(e) Query Toggle Monitoring Select View Probability Table View/Modify Decision Add/Remove/Relabel Node Optimize Decisions Independence Query

Create Solve

Click on a node to make an observation about its value.

Querying Node Febra

Click on a factor to inspect it.

Current Factors:

- f0(Gripe)
- f1(Abces)
- f2(Gripe, Abces, Febra)
- f3(Febra, Obeseala)
- f4(Febra, Anorexia)

Eliminated Factors:

1) Prune Irrelevant Variables: Yes No

2) Project Observations: Project Observations

3) Sum Out Variables: Heuristic: MinFill Sum Out Next Automatically Sum Out

Close Reset Query Undo Elimination Order

Inspecting Factors

Click on a value to see its derivation or select a new factor to inspect it.

Reorder Variable Columns Inspecting Factor f3(Febra, Obeseala)

Febra	Obeseala	Value
Da	Da	0.6
Da	Nu	0.4
Nu	Da	0.2
Nu	Nu	0.8

This factor represents $P(\text{Obeseala} \mid \text{Febra})$.

OK

Belief Network Mode

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File Edit View Network Options Help

Make Observation Query Plot Query Toggle Monitoring Select View Probability Table View Model Decision Add Not-Forgetting Arcs Synthesize Decision Independence Quiz

Create Solve

Click on a node to make an observation about its value.

Query Results

Query Results for Variable Febra [Gripe=Da] [Abces=Nu]

$P(\text{Febra} = \text{Da}) = 0.25$

$P(\text{Febra} = \text{Nu}) = 0.75$

OK

Querying Node Febra

Press "Reset Query" to start a new query.
Maximum Encountered Factor Size: 8

Click on a factor to inspect it.
Current Factors:
Answer: $f_6(\text{Febra})$

Eliminated Factors:
 $f_0(\text{Gripe})$
 $f_1(\text{Abces})$
 $f_3(\text{Febra}, \text{Obeseala})$
 $f_4(\text{Febra}, \text{Anorexia})$
 $f_2(\text{Gripe}, \text{Abces}, \text{Febra})$
 $f_5(\text{Abces}, \text{Febra})$

1) Prune Irrelevant Variables:
Irrelevant Variables Pruned

2) Project Observations:
Observations Projected

3) Sum Out Variables:
Heuristic: Min-Fill
No Variables Eliminated
Automatically Sum Out

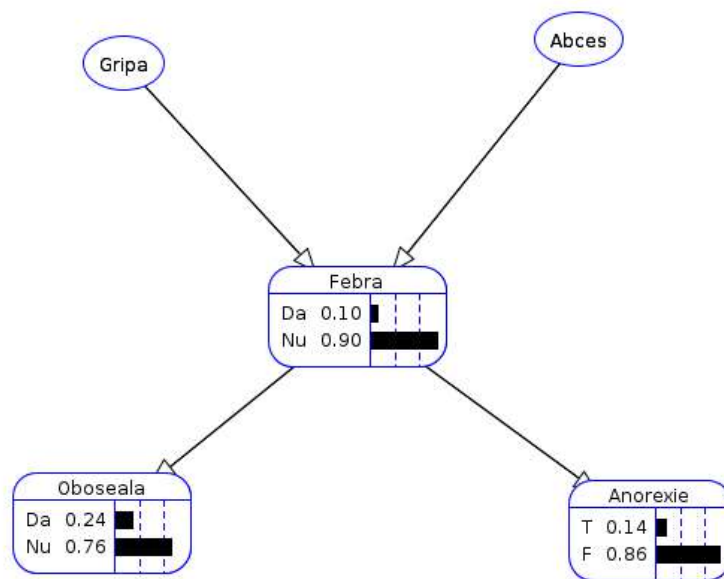
4) Multiply:
No Multiplication Needed

5) Normalize:
No Normalization Needed

Close Reset Query Undo Elimination Order

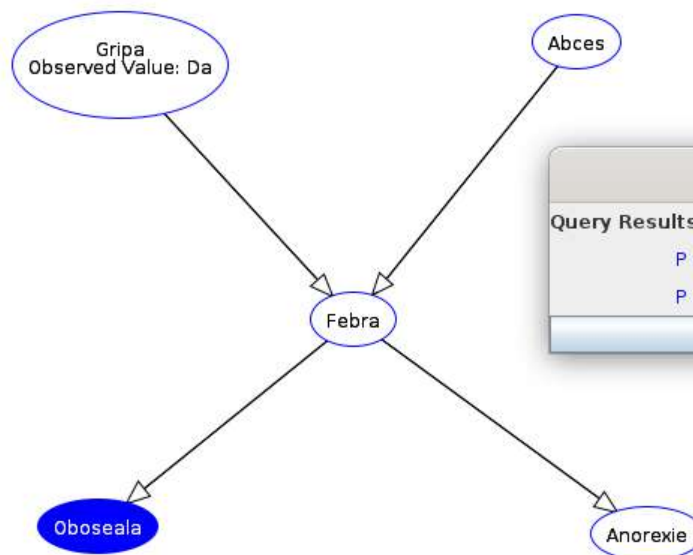
Belief Network Mode

Click on an entity and drag the mouse to move it.





Click on a node to query its probability or utility.



Query Results		x	
Query Results for Variable Oboseala [Gripa=Da]			
P (Oboseala = Da)		= 0.311	
P (Oboseala = Nu)		= 0.689	
		OK	

Querying Node Oboseala

Click on a factor to inspect it

Current Factors:

f3(Febra, Oboseala)

Eliminated Factors:

f0(Gripa)
f1(Abces)
f2(Gripa, Abces, Febra)
f4(Febra, Anorexie)

1) Prune Irrelevant Variables:

Irrelevant Variables Pruned

2) Project Observations:

Project Observations

3) Sum Out Variables:

Heuristic:

Sum Out Next

Automatically Sum Out

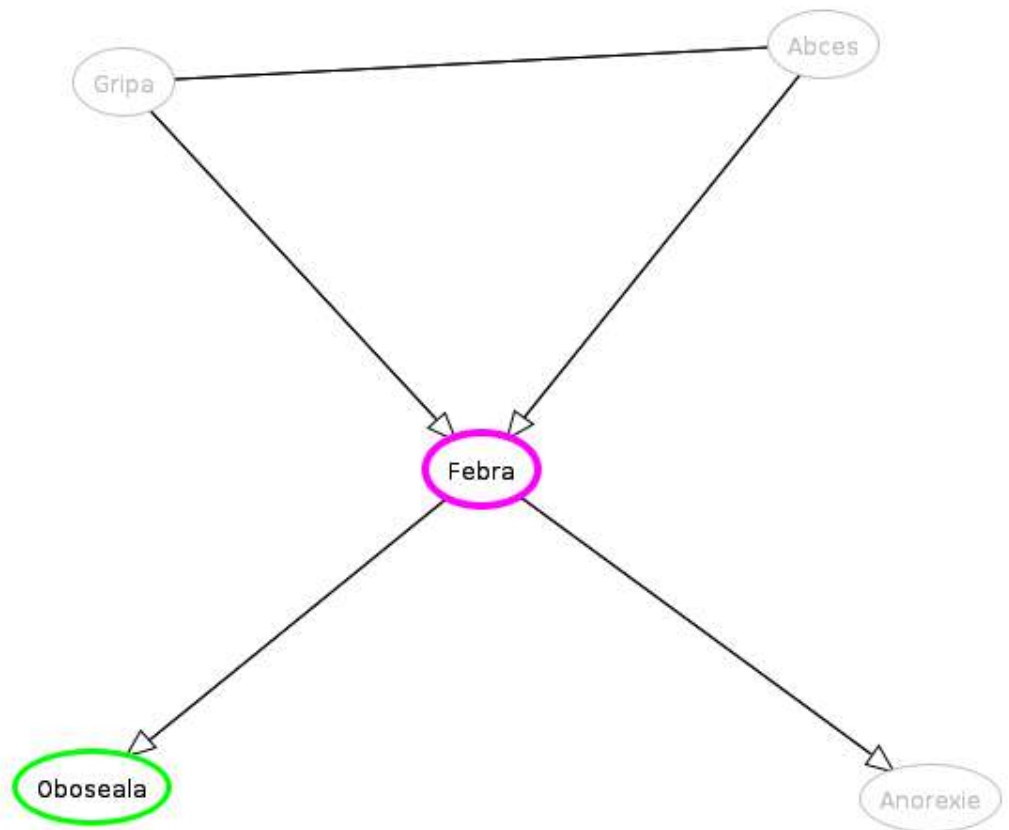
4) Multiply:

Multiply Final Factors

5) Normalize:

Normalize Final Factor

Project observations by clicking on an observed node or by pressing "Project Observations".



Close

Reset Query

Undo

Elimination Order

File Edit View Network Options Help

Make Observation Query

Create Solve

Querying Node Oboseala

Click on a factor to inspect it
Current Factors:
Answer: f5(Oboseala)

Press "Reset Query" to start a new query.
Maximum Encountered Factor Size: 8

Eliminated Factors:
f0(Gripa)
f1(Abces)
f2(Gripa, Abces, Febra)
f4(Febra, Anorexie)
f3(Febra, Oboseala)

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2) Pr
3) St
Heuristic:

No Variables Eliminated
Automatically Sum Out

4) Multiply:
No Multiplication Needed

5) Normalize:
No Normalization Needed

Query Results

Query Results for Variable Oboseala [Gripa=Da] [Febr=Nu]

$P(Oboseala = Da) = 0.2$
 $P(Oboseala = Nu) = 0.8$

OK

No Variables Eliminated
Automatically Sum Out

4) Multiply:
No Multiplication Needed

5) Normalize:
No Normalization Needed

Close Reset Query Undo Elimination Order

```
graph TD; Gripa((Gripa)) --- Abces((Abces)); Gripa((Gripa)) --- Febra((Febr)); Abces((Abces)) --- Febra((Febr)); Febra((Febr)) --- Oboseala((Oboseala)); Febra((Febr)) --- Anorexie((Anorexie));
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