Traceis[™] Data Exploration Studio Associative rules



In this example, the diabetes dataset was used. First, select the grouping step.



Select the associative rules tab



Select the descriptors

Select all variables to use as descriptors. In this example, all variables were selected. To select multiple non-contiguous variables, use ctrl-click and for contiguous variables use the shift-click.



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Optionally restrict rules on THEN-part

In this example, only rules where diabetes is in the THEN-part of the rule are generated.



1

Specify minimum rule support, confidence and lift



Display the rules



2

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3

IF-part display

The first column displays the IF-part of the rule.

2 THEN-part display

The second column displays the THEN-part of the rule.

Rule statistics

The following rule statistics are displayed: count, support, confidence and lift.

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State State Tested Tested Contact State Contact State Contact State Contact State Contact State State <thstate< th=""> State State</thstate<>	1. Definition	Clustering Associative rules Decision trees				```	\smile		
2 https://doc Program (grouped) <	Ontro		IF-part	THEN-part	Count	Support	Consequence	Lift	
2 Properation Press-Access (proped) - for Distets - no B2 0.313 0.432 1.442 9 Internet Access (proped) - for ADP Proper (proped) - for Distets - no B2 0.33 0.342 1.442 9 Internet Access (proped) - for ADP Proper (proped) - for Distets - no B2 0.343 0.343 1.442 9 Internet Access (proped) - for ADP Proper (proped) - for Distets - no 14 0.043 0.343 1.442 9 Internet Access (proped) - for ADP Proper (proped) - for Distets - no 46 0.054 0.051 1.462 9 Internet Access (proped) - for ADP Proper (proped) - for Distets - no 46 0.054 0.051 1.462 9 Internet Access (proped) - for ADP Proper (proped) - for Distets - no 46 0.051 0.051 1.462 9 Internet Access (proped) - for ADP Proper (proped) - for Distets - no 2 0.055 0.051 1.462 10 Internet Access (proped) - for ADP Proper (proped) - for Distets - no 2 0.055 0.064 0.051 1.462 10 Internet Access (proped) - for ADP Proper (proped) - for Distets - no 2 0.055 1.462 10 Internet Access (proped) - for ADP Proper (proped) -		Select variables (descriptors):	Pregnant (grouped) = low	Diabetes = no	181	0.29	0.801	1.225	^
Image: Construction Distance: Construction <th>2 Dropprotice</th> <th>Pregnant (grouped)</th> <th>Plasma-Glucose (grouped) = low</th> <th>Diabetes = no</th> <th>82</th> <th>0.131</th> <th>0.943</th> <th>1.442</th> <th></th>	2 Dropprotice	Pregnant (grouped)	Plasma-Glucose (grouped) = low	Diabetes = no	82	0.131	0.943	1.442	
Prese Control EE (groupe) Contro EE (groupe) Con	2. Proporoion	Plasma-Glucose (grouped)	BM (grouped) = low	Diabetes = no	80	0.128	0.92	1.406	
Instrumentation Bill (ground) with the stand parks statusci st	Prepare	DiastolicEP (grouped)	Hasma-Glucose (grouped) = medium ANU Pregnant (grouped) = low	Diabetes = no	133	0.213	0.821	1.256	
Presentation Operation		BM (grouped)	Prasma-Gucose (grouped) = low AND Pregnant (grouped) = low	Diabetes = no	41	0.000	0.975	1.485	
Test or grand Application Datation Product Autor on TEBjort Test of an application Product Autor on Autor Property Company - Involution Data (SEP) grouped - Involution Autor on Autor Property Company - Involution Data (SEP) grouped - Involution Data (SEP) grouped - Involution Data (SEP) grouped - Involution Data (SEP) grouped - Involution Data (SEP) grouped - Involution Data (SEP) grouped - Involution Data (SEP) grouped - Involution <th>3. Implementation</th> <td>DPF (grouped)</td> <td>BM (grouped) = formal And Pregnant (grouped) = low</td> <td>Diabetes = no</td> <td>40</td> <td>0.054</td> <td>0.976</td> <td>1.492</td> <td></td>	3. Implementation	DPF (grouped)	BM (grouped) = formal And Pregnant (grouped) = low	Diabetes = no	40	0.054	0.976	1.492	
Deficiency Deficiency <thdeficiency< th=""> Deficiency Deficien</thdeficiency<>	Tables and graphs	Age (grouped)	BM (grouped) = formal AND Pregnant (grouped) = form	Diabetes = no	58	0.093	0.921	1.408	
Balance Performation Image: Performation and Perfor	Totales and graphs	Diabetes	DPF (grouped) = low AND Pregnant (grouped) = low	Diabetes = no	88	0.141	0.846	1.294	
Series Predictor Description Descripion <thdescription< th=""> <thdes< th=""><th>Statistics</th><td></td><td>DPF (grouped) = medium AND Pregnant (grouped) = low</td><td>Diabetes = no</td><td>68</td><td>0.109</td><td>0.81</td><td>1.238</td><td></td></thdes<></thdescription<>	Statistics		DPF (grouped) = medium AND Pregnant (grouped) = low	Diabetes = no	68	0.109	0.81	1.238	
Preductor Unstantion Description Description <thdescription< th=""> <thdescription< th=""> <t< th=""><th>Grouping</th><td></td><td>Age (grouped) = 20-39 AND Pregnant (grouped) = low</td><td>Diabetes = no</td><td>173</td><td>0.277</td><td>0.84</td><td>1.284</td><td></td></t<></thdescription<></thdescription<>	Grouping		Age (grouped) = 20-39 AND Pregnant (grouped) = low	Diabetes = no	173	0.277	0.84	1.284	
Predictor Database Mit (grouped) - two AD Pregnant (grouped) - makin Databases - no 21 0.034 0.013 1.385 Continuent Agey model Mit (grouped) - two AD Pregnant (grouped) - makin Databases - no 20 0.014 0.015 0.016 0.016 1.442 Agey model Mit (grouped) - two AD Pregnant (grouped) - two Databases - no 20 0.016 0.016 0.016 1.442 Mit (grouped) - two AD Pregnant (Grouped) - two Databases - no 20 0.016 0.016 1.442 Mit (grouped) - two AD Pregnant (Grouped) - two Databases - no 20 0.016 0.026 1.471 Mit (grouped) - two AD Presma (Grouped) - two Databases - no 20 0.016 0.022 1.471 Mit (grouped) - two AD Presma-Glouped (grouped) - two Databases - no 20 0.012 0.042 1.471 Age (grouped) - 303 AND Presma-Glouped (grouped) - two Databases - no 20 0.012 0.042 1.471 Age (grouped) - 303 AND Presma-Gloupe (grouped) - two Databases - no 20 0.012 0.022 1.471 Mit (grouped) - stwo AD Presma-Gloupe (grouped) - two Databases - no 4 <td< th=""><th></th><td>Restrict rules on THEN-part</td><td>Plasma-Glucose (grouped) = low AND Pregnant (grouped) = medium</td><td>Diabetes = no</td><td>22</td><td>0.035</td><td>0.88</td><td>1.346</td><td></td></td<>		Restrict rules on THEN-part	Plasma-Glucose (grouped) = low AND Pregnant (grouped) = medium	Diabetes = no	22	0.035	0.88	1.346	
Catchonical Apply model Multiproceed = torus ADD Peame-Glacose (grouped) = how Databetes = no 0.0 0.001 0.008 1.442 Multiproceed = torus ADD Peame-Glacose (grouped) = how Databetes = no 0.0 0.005 0.011 0.008 1.442 Multiproceed = torus ADD Peame-Glacose (grouped) = how Databetes = no 0.0 0.012 0.015 1.462 Multiproceed = torus ADD Peame-Glacose (grouped) = how Databetes = no 0.001 0.035 1.477 Multiproceed = torus ADD Peame-Glacose (grouped) = how Databetes = no 0.001 0.046 1.477 Multiproceed = torus ADD Peame-Glacose (grouped) = how Databetes = no 0.001 0.046 1.477 Multiproceed = torus ADD Peame-Glacose (grouped) = how Databetes = no 0.001 0.046 0.041 2.441 Multiproceed = torus ADD Beame-Glacose (grouped) = how Databetes = no 0.001 0.046 1.447 Multiproceed = torus ADD Beame-Glacose (grouped) = how Databetes = no 0.001 0.041 2.441 Multiproceed = torus ADD Beame-Glacose (grouped) = how Databetes = no 0.001 0.014	Prediction	Diabetes	BMI (grouped) = low AND Pregnant (grouped) = medium	Diabetes = no	21	0.034	0.913	1.396	
Exclusion Mamma rappot 20.3 Mamma ra			BMI (grouped) = low AND Plasma-Glucose (grouped) = medium	Diabetes = no	63	0.101	0.969	1.482	
Apply noted Mit (grouppe) Temps Character (grouppe) Disk dets mod Disk dets Mit Disk dets	4. Deployment	Minimum support: 20 0	DiastolicEP (grouped) = normal AND Plasma-Glucose (grouped) = low	Diabetes = no	70	0.112	0.946	1.447	
Minimum confidence: 0.0 ± DMI (groupe) - deve AND Ream-Guccos (groupe) - low Catedets = no. 20 0.045 0.033 1.427 Minimum confidence: 0.0 ± DPI (groupe) - low ADD Ream-Guccos (groupe) - low Catedets = no. 20 0.045 0.033 1.427 Minimum confidence: 0.0 ± DPI (groupe) - low ADD Ream-Guccos (groupe) - low Catedets = no. 20 0.013 0.044 1.427 Age (groupe) - down ADD Ream-Guccos (groupe) - low Catedets = no. 20 0.013 0.044 1.427 Age (groupe) - down ADD Ream-Guccos (groupe) - low Catedets = no. 20 0.011 0.042 2.480 Age (groupe) - down ADD Ream-Guccos (groupe) - low Catedets = no. 26 0.014 0.02 2.490 Age (groupe) - down ADD Ream-Guccos (groupe) - low Catedets = no. 46 0.014 0.22 1.407 DPF (groupe) - low ADD Ream-ADD Big (groupe) - normal Catedets = no. 46 0.014 0.22 1.407 DPF (groupe) - low ADD Ream-ADD Big (groupe) - normal Catedets = no. 46 0.014 0.25 1.402 DPF (groupe) - low ADD Ream-ADD Big (groupe) - normal Catedets = no. 13 0.131	Apply model		BMI (grouped) = normal AND Plasma-Glucose (grouped) = low	Diabetes = no	22	0.035	0.917	1.402	
Memory III: 0.0 5 DFF (grouppe) - low AND Plasma-Gacose (groupped) - low Databetes - no. 50 0.00 0.052 1.471 Derginary DFF (grouppe) - low AND Plasma-Gacose (groupped) - low Databetes - no. 50 0.00 0.052 1.421 Derginary DFF (grouppe) - low AND Plasma-Gacose (groupped) - low Databetes - no. 50 0.001 0.052 2.430 MFI (grouppe) - Low AND Plasma-Gacose (groupped) - low Databetes - no. 56 0.004 0.022 2.430 MFI (grouppe) - Low AND Plasma-Gacose (groupped) - low Databetes - no. 56 0.004 0.021 1.477 MFI (grouppe) - low AND Databetell' (grouppe) - low Databetes - no. 68 0.004 0.035 1.421 DFF (grouppe) - low AND Databetell' (grouppe) - low Catabetes - no. 24 0.031 0.061 1.431 DFF (grouppe) - low AND Databetell' (grouppe) - low Catabetes - no. 24 0.031 0.055 1.431 DFF (grouppe) - low AND Databetell' (grouppe) - norm Catabetes - no. 13 0.051 1.341 Databacter (grouppe) - normal AND Plasma-Catacce (grouppe) - normal AND Plasma-Catacce (grouppe) - normal Catabetes - no. 13 0.051 1.341		Minimum confidence: 0.8 \$	BMI (grouped) = obese AND Plasma-Glucose (grouped) = low	Diabetes = no	28	0.045	0.933	1.427	
Memory III: U.9 :5 DFF (groupe) - median ARD Plana-Glocos (groupe) - bw Databets = no 36 0.042 0.045 1.473 Depty			DPF (grouped) = low AND Plasma-Glucose (grouped) = low	Diabetes = no	50	0.08	0.962	1.471	
Depart Depart <thdepart< th=""> <thdepart< th=""> <thdepart< th="" th<=""><th></th><td>Minimum Itt: 0.8 🗢</td><td>DPF (grouped) = medium AND Plasma-Glucose (grouped) = low</td><td>Diabetes = no</td><td>26</td><td>0.042</td><td>0.963</td><td>1.473</td><td></td></thdepart<></thdepart<></thdepart<>		Minimum Itt: 0.8 🗢	DPF (grouped) = medium AND Plasma-Glucose (grouped) = low	Diabetes = no	26	0.042	0.963	1.473	
Depty PMI (groupe)			Age (grouped) = 20-39 AND Plasma-Glucose (grouped) = low	Diabetes = no	70	0.112	0.946	1.447	
Age (grouped) = 4.03 AO Parso-Alaccos (grouped) - hyp Libetet = no. 64 0.011 0.044 2.44 DFF (grouped) = hym AOD Edit (grouped) = hym Libetet = no. 64 0.074 0.032 1.407 UFF (grouped) = hym AOD Edit (grouped) = hym Libetet = no. 64 0.074 0.038 0.698 1.407 UFF (grouped) = normal Libetet = no. 64 0.074 0.035 1.462 DFF (grouped) = normal Libetet = no. 64 0.071 0.015 1.246 DFF (grouped) = normal Libetet = no. 64 0.071 0.015 1.246 DFF (grouped) = normal Libetet = no. 64 0.071 0.015 1.246 DFF (grouped) = normal Libetet = no. 64 0.071 0.015 1.246 DFF (grouped) = normal Disbetet = no. 64 0.071 0.015 1.246 DFF (grouped) = normal Disbetet = no. 64 0.071 0.015 1.241 DFF (grouped) = normal Disbetet = no. 64 0.071 0.015 1.241 DFF (grouped) = normal Disbetet = no. 64 0.071 0.015 1.241 DFF (grouped) = normal Disbetet = no. 64 0.071 0.015 1.241 DFF (grouped) = normal Disbetet = no.64 0.071 0.015 1.241 <td< th=""><th></th><td>Display</td><td>BMI (grouped) = severely obese AND Plasma-Glucose (grouped) = high</td><td>Diabetes = ye:</td><td>s 41</td><td>0.066</td><td>0.82</td><td>2.369</td><td></td></td<>		Display	BMI (grouped) = severely obese AND Plasma-Glucose (grouped) = high	Diabetes = ye:	s 41	0.066	0.82	2.369	
Bitl (grouped) - own ALL) (usbitcher (grouped) - normat Likedes - no the U.014 U.015 1.509 Deff (grouped) - own ALL) (usbitcher (grouped) - normat Diaketes - no the 0.008 1.509 Alge (grouped) - action ALD Point Diaketes - no the 0.0014 0.015 1.509 Alge (grouped) - action ALD Point Diaketes - no the 0.014 0.015 1.509 Alge (grouped) - action ALD Point Diaketes - no the 0.015 1.501 Diated Conference 0.014 0.015 1.501 Alge (grouped) - action ALD Point Diaketes - no the 0.015 1.501 Diated Conference 0.014 0.015 1.501 1.501 Diated Conference 0.014 0.015 1.501 1.501 Diated Conference 0.015 1.501 1.501 1.501 Diated Conference 0.016 0.015 1.501 1.501 Diated Conference 0.016 0.015 1.501 1.501 Diff (grouped) - own ALD Pasmo-Clacces (grouped) - median ALD Payrer (grouped) 0.506 0.015 1.501 Diff (grouped) - brank ALD Pasmo-Clacces (grouped) - median ALD Payrer (grouped) 0.504 0.505 1.501 Diff (grouped) - comma ALD Pasmo-Clacces (grouped) - median ALD Payrer (grouped) 0.504			Age (grouped) = 40-59 AND Plasma-Glucose (grouped) = high	Diabetes = yes	\$ 38	0.061	0.844	2.44	
Life (groupe) For (groupe) Life (groupe) </th <th></th> <td></td> <td>BMI (grouped) = low AND DiastolicBP (grouped) = normal</td> <td>Diabetes = no</td> <td>65</td> <td>0.104</td> <td>0.915</td> <td>1.4</td> <td></td>			BMI (grouped) = low AND DiastolicBP (grouped) = normal	Diabetes = no	65	0.104	0.915	1.4	
apr (grouped) 203 AND DM (grouped) treed 100 (grouped) 005 (grouped) 1542 DPF (grouped) netdlaw AND Parent Databetes mo 40 0071 (grouped) 0058 (grouped) Ape (grouped) netdlaw AND Parent Databetes mo 40 0076 (grouped) 1343 Databetes mo 40 0076 (grouped) 1344 0076 (grouped) 1343 Databetes mo 40 0076 (grouped) 1343 0181 (grouped) 0058 (grouped) Databetes mo 40 0076 (grouped) 1344 BM (grouped) netdlaw AND Parent-Clacces (grouped) netdlaw AND Parent 0168 (grouped) 0058 (grouped) PF (grouped) netdlaw AND Parent-Clacces (grouped) netdlaw AND Parent 0168 (grouped) 0168 (grouped) PF (grouped) netdlaw AND Parent-Clacces (grouped) netdlaw AND Parent 0168 (grouped) 0168 (grouped) PF (grouped) netdlaw AND Parent-Clacces (grouped) netdlaw AND Parent 0172 (grouped) 0181 (grouped) PF (grouped) netdlaw AND Parent netdlaw AND Parent 0172 (grouped) 0172 (grouped) 0173 (grouped) Ape (grouped) -1070 (grouped) netdlaw AND Parent 0168 (grouped) 0172 (grouped) 0172 (grouped) DatateckP (grouped)			DPF (grouped) = low AND BM (grouped) = low	Diabetes = no	45	0.074	0.92	1.407	
DFF (grouped) = normal MD BM (grouped) = normal Usbates = no 44 0.071 0.915 1.946 App (grouped) = normal AND BM (grouped) = normal Dabates = no 94 0.071 0.915 1.946 District/CF (grouped) = normal AND Famile (Access (grouped)) = normal AND Famile (Grouped) = normal AND Famile (Grouped) = normal AND Famile (Access (grouped)) = normal AND Famile (Grouped) = normal AND Famil			Ann (mouned) = 20,20,000 PM (mouned) = 1000	Diabetes = no	65	0.030	0.005	1,000	
Ager (grouped) -200 AND DM (grouped) -rontind Classes - no 90 0.159 0.259 1.33 Districted(P) (grouped) -rontind AND Presmo -Classes (grouped) -rontind AND Presmo -Class			DPE (grouped) = medium (MD BM (grouped) = normal	Diabetes = no	44	0.071	0.815	1.946	
DistrictCP (grouped) = normal AUD Parem-Clucose (grouped) = notekan ADD Pergnet (Age (grouped) = 20-39 AND BM (grouped) = normal	Diabetes = no	99	0.159	0.839	1,283	
BM (grouped) - tom AVX Presmo-Clacose (grouped) - module AVX Pregmer (grouped) - Toketes = no 1 0.05 1 1.526 BM (grouped) - tom AVX Presmo-Clacose (grouped) - module AVX Pregmer (grouped) - Toketes = no 1 0.057 1.036 DFF (grouped) - tom AVX Presmo-Clacose (grouped) - module AVX Pregmer (grouped) - Toketes = no 1 0.014 0.057 1.030 DFF (grouped) - tom AVX Presmo-Clacose (grouped) - module AVX Pregmer (grouped) - Toketes = no 1 0.014 0.057 1.030 DFF (grouped) - tom AVX Presmo-Clacose (grouped) - module AVX Pregmer (grouped) - Toketes = no 1 0.034 0.057 1.330 DFF (grouped) - toketes = no 1 0.034 0.057 1.340 1.340 Age (grouped) - toketes AVX Presmo-Clacose (grouped) - module AVX Presmore (grouped) - toketes = no 1 0.032 0.052 1.340 Detected terms Heat Toketes Toketes = no 1 0.034 0.057 1.440 Selected terms Heat Toketes Toketes = no 1 0.042 0.055 1.340 Detected terms Heat Toketes Toketes = no 1 0.042 0.055 1.340 Detected terms Heat Toketes Toketes Toketes 0.055			DiastolicEP (grouped) = normal AND Plasma-Glucose (grouped) = medium AND Pregnant .	Diabetes = no	113	0.181	0.876	1.34	
Bit (grouped) = rom/a ND-Pierme Glucose (grouped) = medium AD-Piergreit (grouped). Datatets = no 12 0.067 0.113 1.396 DFF (grouped) = low AD-Pierme-Glucose (grouped) = medium AD-Piergreit (grouped). Datatets = no 14 0.014 0.055 1.300 DFF (grouped) = medium AD-Pierme-Glucose (grouped) = medium AD-Piergreit (grouped). Datatets = no 14 0.017 0.017 0.111 1.340 DFF (grouped) = medium AD-Pierme-Glucose (grouped) = medium AD-Piergreit (grouped). Datatets = no 17 0.204 0.058 1.312 Datatets/EF (grouped) = normit ADD Pierme-Glucose (grouped) = low AND Pregnet (group. Datatets = no 13 0.002 0.035 1.401 Selected from Histograme			BM (grouped) = low AND Plasma-Glucose (grouped) = medium AND Pregnant (grouped)	Diabetes = no	31	0.05	1	1.529	
DFF (groupe) - low MAD Planna-Gucces (groupe) = medium AD Pergrang (groupe). Database - no 65 0.014 0.055 1.300 DFF (groupe) - medium ADP Innem-Gucces (groupe) - medium ADD Pergrang (groupe). Database - no 65 0.075 0.077 1.340 Age (groupe) - 300 ADD Planna Gucces (groupe) - medium ADD Pergrang (groupe). Database - no 127 0.304 0.955 1.312 Database - No DA DA Datama-Gucces (groupe) - medium ADD Pergrang (groupe). Database - no 127 0.304 0.955 1.312 Database - No DA DA Datama-Gucces (groupe) - medium ADD Pergrang (groupe). Database - no 127 0.304 0.955 1.312 Database - No Database - No Database - No Database - no 139 0.002			BMI (grouped) = normal AND Plasma-Glucose (grouped) = medium AND Pregnant (groupe	Diabetes = no	42	0.067	0.913	1.396	
DFF (grouped) motion AND Planma-Glucois (grouped) motion AND Pregnet (group. - Database - no. 49 0.078 0.917 1.340 Age (grouped) 20.33 AND Ensite-Glucois (grouped) forwithin ADD Pregnet (group. - Database - no. 39 0.062 0.355 1.122 Database //			DPF (grouped) = low AND Plasma-Glucose (grouped) = medium AND Pregnant (grouped).	Diabetes = no	65	0.104	0.855	1.308	
Age (grouped) = 20.29 AND Fasma-Glucose (grouped) = medium ADD Fargering (grouped) = mod (group			DPF (grouped) = medium AND Plasma-Glucose (grouped) = medium AND Pregnant (group	Diabetes = no	49	0.079	0.817	1.249	
Destekci6P (grouped) - normal AND Plasme-Okucose (grouped) - low AND Pregnet (groDatedets - no 39 0.002 0.075 1.491 Selected teme Histograme D. Pregnet (grouped) - Network (grouped). Destekci6P (grouped). D. Pregnet (grouped). Destekci6P (grouped). Destekci6P (grouped).			Age (grouped) = 20-39 AND Plasma-Glucose (grouped) = medium AND Pregnant (groupe.	Diabetes = no	127	0.204	0.858	1.312	
Gelected fermi Hategrave D. Prograve (grouped). Plasme-Glucose (grouped). Destrict/EP (grouped). DPF (grouped). Age (grouped). Destrictes.			DiastolicEP (grouped) = normal AND Plasma-Glucose (grouped) = low AND Pregnant (gro	Diabetes = no	39	0.062	0.975	1.491	~
			Salectori formi jesograma D. Programi (grouped). Plasma-Oluccoa (grouped) Diattolic® (grouped) BM (group	ied) DPF (groue	oed) Age ((grouped). Diebet	68.		

MAKING SENSE OF DATA



Click on header to sort

2

Click on row to view observations

