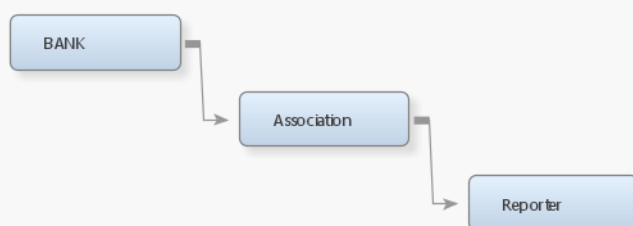# SAS Enterprise Miner Report

User   = u63340697
Date   = 06:20:33 23 October 2023
Project   = Prac8_Association_analysis
Diagram   = Association_Analysis

Start Node = Report
Node label = Reporter
Nodes   = ALL
Showall   = Y

Format   = PDF
Style   = LISTING

SAS Enterprise Miner Report

Node=BANK
Summary

Node id = Ids
Node label = BANK
Meta path = Ids
Notes =

Node=BANK
Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	DataSource		DsCreatedBy	u63340697		NBytes	787456	.
ApplyIntervalLevelLowerLimit	Y		DsId	bank		NCols	3	.
ApplyMaxClassLevels	Y		DsModifiedBy	u63340697		NObs	32367	.
ApplyMaxPercentMissing	Y		DsModifyDate	2013657633.4		NewTable		
CMeta	WORK.M0TNRJHV		DsSampleName			NewVariableRole	REJECT	
ComputeStatistics	N		DsSampleSize			OutputType	VIEW	
DBPassThrough	Y		DsSampleSizeType			Role	TRANSACTION	TRAIN
Data	AAEM.BANK		DsScope	LOCAL		Sample	D	
DataSelection	DATASOURCE		IdentifyEmptyColumns	Y		SampleSizeObs	10000	
DataSource	bank		IntervalLowerLimit	20		SampleSizePercent	20	
DataSourceRole	TRANSACTION		Library	AAEM		SampleSizeType	PERCENT	
Description			MaxClassLevels	20		Scope	LOCAL	
DropMapVariables	Y		MaxPercentMissing	50		Segment		
DsCreateDate	2013657633.3		MetaAdvisor	BASIC		Table	BANK	

Node=BANK
Data Attributes

Attribute	Value	Attribute	Value	Attribute	Value
Data Name	BANK	Date Created	02 April 2012 18:02:35	Data Size	787456
Data Type	DATA	Date Modified	02 April 2012 18:02:35	Role	TRANSACTION
Data Label		Number Rows	32367	Segment	
Engine	BASE	Number Columns	3	Data Library	AAEM

Node=BANK
Variables List

Name	Label	Role	Level	Type	Length	Format	Creator
ACCOUNT	Account Number	ID	INTERVAL	N	8	BEST12.0	
SERVICE	Type of Account or Service	TARGET	NOMINAL	C	8	$F8.	
VISIT	Order of Service Addition	SEQUENCE	INTERVAL	N	8	BEST12.0	

SAS Enterprise Miner Report
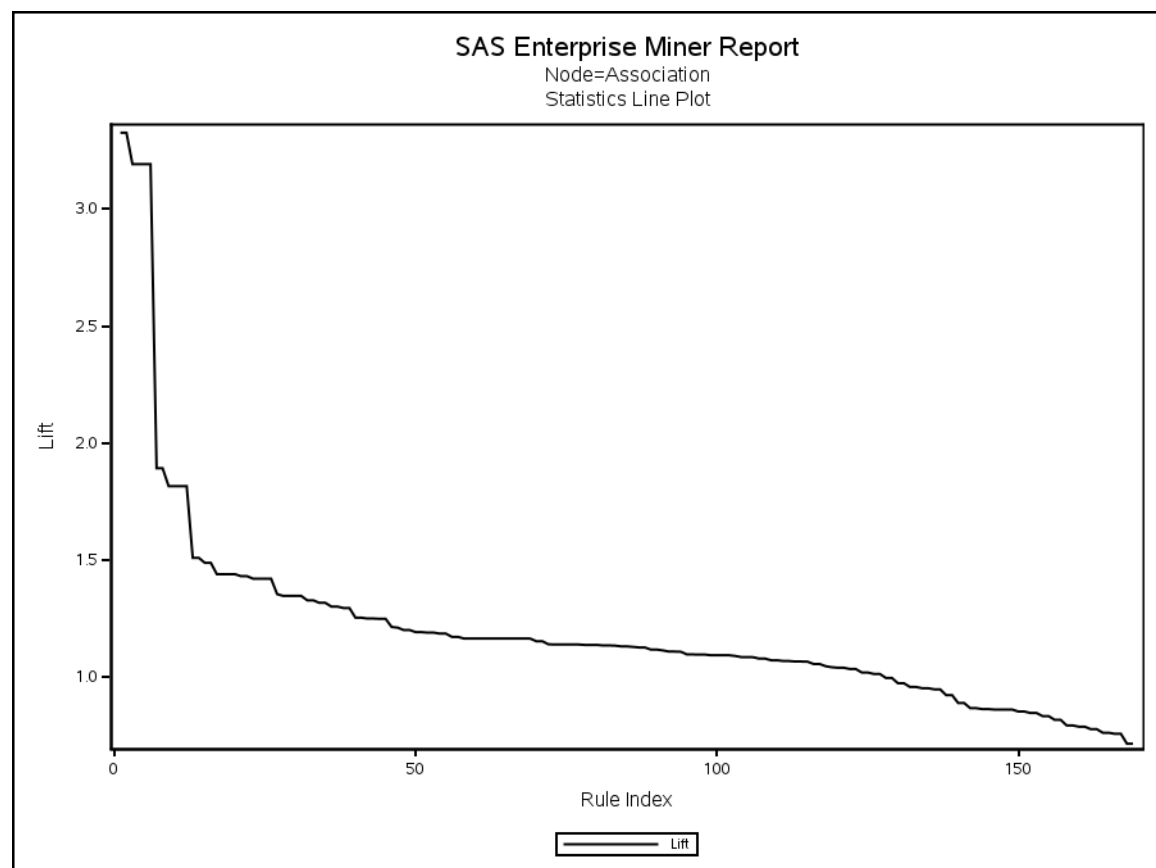
**Node=Association
Summary**

Node id = Assoc
Node label = Association
Meta path = Ids => Assoc
Notes =

**Node=Association
Properties**

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	Association		ItemCount	4		PctsupA	5	
AssocSupportType	PERCENT		MaxDur	.		PctsupS	2	
ChainCount	3		MaxItems	100000		Recommendation	N	
ConsolTime	0		MinConf	10		SeqSupportType	PERCENT	
Criterion	DEFAULT		NumRules	200		SupportA	.	
ExportIdRule	Y	N	NumTransposeRules	200		SupportS	.	2

**Node=Association
Variable Summary**

Role	Level	Frequency Count	Name
TARGET	NOMINAL	1	SERVICE
ID	INTERVAL	1	ACCOUNT

**Node=Association
Rules Table**

Rule	Expected Confidence(%)	Support(%)	Lift	Transaction Count	Left Hand of Rule	Right Hand of Rule
CKING & CCRD ==> CKCRD	11.30	5.58	3.33	446.00	CKING & CCRD	CKCRD
CKCRD ==> CKING & CCRD	14.85	5.58	3.33	446.00	CKCRD	CKING & CCRD
CKCRD ==> CCRD	15.48	5.58	3.19	446.00	CKCRD	CCRD
CKING & CKCRD ==> CCRD	15.48	5.58	3.19	446.00	CKING & CKCRD	CCRD
CCRD ==> CKCRD	11.30	5.58	3.19	446.00	CCRD	CKCRD
CCRD ==> CKING & CKCRD	11.30	5.58	3.19	446.00	CCRD	CKING & CKCRD
HMEQLC ==> CKING & CCRD	14.85	4.63	1.89	370.00	HMEQLC	CKING & CCRD
CKING & CCRD ==> HMEQLC	16.47	4.63	1.89	370.00	CKING & CCRD	HMEQLC
HMEQLC ==> CCRD	15.48	4.63	1.82	370.00	HMEQLC	CCRD
HMEQLC & CKING ==> CCRD	15.48	4.63	1.82	370.00	HMEQLC & CKING	CCRD
CCRD ==> HMEQLC	16.47	4.63	1.82	370.00	CCRD	HMEQLC
CCRD ==> HMEQLC & CKING	16.47	4.63	1.82	370.00	CCRD	HMEQLC & CKING
SVG & HMEQLC ==> CKING & ATM	36.19	6.09	1.51	487.00	SVG & HMEQLC	CKING & ATM
CKING & ATM ==> SVG & HMEQLC	11.15	6.09	1.51	487.00	CKING & ATM	SVG & HMEQLC
SVG & CKING & ATM ==> HMEQLC	16.47	6.09	1.49	487.00	SVG & CKING & ATM	HMEQLC
HMEQLC ==> SVG & CKING & ATM	24.85	6.09	1.49	487.00	HMEQLC	SVG & CKING & ATM
SVG & ATM ==> HMEQLC	16.47	6.09	1.44	487.00	SVG & ATM	HMEQLC
SVG & ATM ==> HMEQLC & CKING	16.47	6.09	1.44	487.00	SVG & ATM	HMEQLC & CKING
HMEQLC ==> SVG & ATM	25.69	6.09	1.44	487.00	HMEQLC	SVG & ATM
HMEQLC & CKING ==> SVG & ATM	25.69	6.09	1.44	487.00	HMEQLC & CKING	SVG & ATM
HMEQLC ==> CKING & ATM	36.19	8.53	1.43	682.00	HMEQLC	CKING & ATM
CKING & ATM ==> HMEQLC	16.47	8.53	1.43	682.00	CKING & ATM	HMEQLC
SVG & HMEQLC ==> ATM	38.46	6.09	1.42	487.00	SVG & HMEQLC	ATM
SVG & HMEQLC & CKING ==> ATM	38.46	6.09	1.42	487.00	SVG & HMEQLC & CKING	ATM
ATM ==> SVG & HMEQLC	11.15	6.09	1.42	487.00	ATM	SVG & HMEQLC
ATM ==> SVG & HMEQLC & CKING	11.15	6.09	1.42	487.00	ATM	SVG & HMEQLC & CKING
CD & ATM ==> SVG & CKING	54.17	5.26	1.36	420.00	CD & ATM	SVG & CKING
ATM ==> HMEQLC	16.47	8.53	1.35	682.00	ATM	HMEQLC
ATM ==> HMEQLC & CKING	16.47	8.53	1.35	682.00	ATM	HMEQLC & CKING
HMEQLC ==> ATM	38.46	8.53	1.35	682.00	HMEQLC	ATM
HMEQLC & CKING ==> ATM	38.46	8.53	1.35	682.00	HMEQLC & CKING	ATM
CKING & AUTO ==> ATM	38.46	4.35	1.33	348.00	CKING & AUTO	ATM
ATM ==> CKING & AUTO	8.52	4.35	1.33	348.00	ATM	CKING & AUTO
HMEQLC & ATM ==> SVG & CKING	54.17	6.09	1.32	487.00	HMEQLC & ATM	SVG & CKING
SVG & CKING ==> HMEQLC & ATM	8.53	6.09	1.32	487.00	SVG & CKING	HMEQLC & ATM
CKCRD ==> SVG & CKING	54.17	7.97	1.30	637.00	CKCRD	SVG & CKING
SVG & CKING ==> CKCRD	11.30	7.97	1.30	637.00	SVG & CKING	CKCRD
CKING & ATM ==> AUTO	9.29	4.35	1.30	348.00	CKING & ATM	AUTO
AUTO ==> CKING & ATM	36.19	4.35	1.30	348.00	AUTO	CKING & ATM
CKING & CD ==> MMDA	17.44	4.59	1.25	367.00	CKING & CD	MMDA
MMDA ==> CKING & CD	20.99	4.59	1.25	367.00	MMDA	CKING & CD
AUTO ==> ATM	38.46	4.47	1.25	357.00	AUTO	ATM
ATM ==> AUTO	9.29	4.47	1.25	357.00	ATM	AUTO
SVG & CKING ==> HMEQLC	16.47	11.15	1.25	891.00	SVG & CKING	HMEQLC
HMEQLC ==> SVG & CKING	54.17	11.15	1.25	891.00	HMEQLC	SVG & CKING
CD & ATM ==> SVG	61.87	5.38	1.22	430.00	CD & ATM	SVG
CKING & CD & ATM ==> SVG	61.87	5.26	1.21	420.00	CKING & CD & ATM	SVG
MMDA & CKING ==> CD	24.53	4.59	1.20	367.00	MMDA & CKING	CD
CD ==> MMDA & CKING	15.58	4.59	1.20	367.00	CD	MMDA & CKING
ATM ==> SVG & CKING	54.17	24.85	1.19	1986.0	ATM	SVG & CKING
SVG & CKING ==> ATM	38.46	24.85	1.19	1986.0	SVG & CKING	ATM
SVG & CKING ==> CCRD	15.48	9.99	1.19	798.00	SVG & CKING	CCRD
CCRD ==> SVG & CKING	54.17	9.99	1.19	798.00	CCRD	SVG & CKING
SVG & CKING ==> AUTO	9.29	5.97	1.19	477.00	SVG & CKING	AUTO
AUTO ==> SVG & CKING	54.17	5.97	1.19	477.00	AUTO	SVG & CKING

Rule	Expected Confidence(%)	Support(%)	Lift	Transaction Count	Left Hand of Rule	Right Hand of Rule
CD ==> MMDA	17.44	5.02	1.17	401.00	CD	MMDA
MMDA ==> CD	24.53	5.02	1.17	401.00	MMDA	CD
CKING ==> CKCRD	11.30	11.30	1.17	903.00	CKING	CKCRD
CKING ==> HMEQLC	16.47	16.47	1.17	1316.0	CKING	HMEQLC
HMEQLC ==> CKING	85.78	16.47	1.17	1316.0	HMEQLC	CKING
CKCRD ==> CKING	85.78	11.30	1.17	903.00	CKCRD	CKING
SVG & HMEQLC ==> CKING	85.78	11.15	1.17	891.00	SVG & HMEQLC	CKING
HMEQLC & ATM ==> CKING	85.78	8.53	1.17	682.00	HMEQLC & ATM	CKING
SVG & CKCRD ==> CKING	85.78	7.97	1.17	637.00	SVG & CKCRD	CKING
CKCRD & CCRD ==> CKING	85.78	5.58	1.17	446.00	CKCRD & CCRD	CKING
HMEQLC & CCRD ==> CKING	85.78	4.63	1.17	370.00	HMEQLC & CCRD	CKING
SVG & HMEQLC & ATM ==> CKING	85.78	6.09	1.17	487.00	SVG & HMEQLC & ATM	CKING
CKING ==> SVG & HMEQLC	11.15	11.15	1.17	891.00	CKING	SVG & HMEQLC
MTG ==> SVG & CKING	54.17	4.69	1.17	375.00	MTG	SVG & CKING
HMEQLC & ATM ==> SVG	61.87	6.09	1.15	487.00	HMEQLC & ATM	SVG
HMEQLC & CKING & ATM ==> SVG	61.87	6.09	1.15	487.00	HMEQLC & CKING & ATM	SVG
CD & ATM ==> CKING	85.78	7.01	1.14	560.00	CD & ATM	CKING
MTG ==> CKING	85.78	7.27	1.14	581.00	MTG	CKING
SVG ==> CKCRD	11.30	7.97	1.14	637.00	SVG	CKCRD
SVG ==> CKING & CKCRD	11.30	7.97	1.14	637.00	SVG	CKING & CKCRD
CKCRD ==> SVG	61.87	7.97	1.14	637.00	CKCRD	SVG
CKING & CKCRD ==> SVG	61.87	7.97	1.14	637.00	CKING & CKCRD	SVG
SVG & CCRD ==> CKING	85.78	9.99	1.14	798.00	SVG & CCRD	CKING
SVG & CD & ATM ==> CKING	85.78	5.26	1.14	420.00	SVG & CD & ATM	CKING
CKING ==> SVG & CCRD	10.22	9.99	1.14	798.00	CKING	SVG & CCRD
CCRD & ATM ==> CKING	85.78	4.84	1.14	387.00	CCRD & ATM	CKING
AUTO & ATM ==> CKING	85.78	4.35	1.14	348.00	AUTO & ATM	CKING
SVG & MTG ==> CKING	85.78	4.69	1.14	375.00	SVG & MTG	CKING
SVG & AUTO ==> CKING	85.78	5.97	1.13	477.00	SVG & AUTO	CKING
CKING & AUTO ==> SVG	61.87	5.97	1.13	477.00	CKING & AUTO	SVG
MMDA & ATM ==> CKING	85.78	5.17	1.13	413.00	MMDA & ATM	CKING
SVG & ATM ==> CKING	85.78	24.85	1.13	1986.0	SVG & ATM	CKING
CKING ==> SVG & ATM	25.69	24.85	1.13	1986.0	CKING	SVG & ATM
CKING ==> CCRD	15.48	14.85	1.12	1187.0	CKING	CCRD
CCRD ==> CKING	85.78	14.85	1.12	1187.0	CCRD	CKING
TRUST ==> CKING	85.78	4.67	1.11	373.00	TRUST	CKING
SVG ==> CKING & ATM	36.19	24.85	1.11	1986.0	SVG	CKING & ATM
CKING & ATM ==> SVG	61.87	24.85	1.11	1986.0	CKING & ATM	SVG
SVG & MMDA ==> CKING	85.78	7.36	1.11	588.00	SVG & MMDA	CKING
CKING & CD ==> SVG	61.87	14.25	1.10	1139.0	CKING & CD	SVG
SVG ==> CKING & CD	20.99	14.25	1.10	1139.0	SVG	CKING & CD
ATM ==> CKING	85.78	36.19	1.10	2892.0	ATM	CKING
CKING ==> ATM	38.46	36.19	1.10	2892.0	CKING	ATM
SVG ==> HMEQLC	16.47	11.15	1.09	891.00	SVG	HMEQLC
SVG ==> HMEQLC & CKING	16.47	11.15	1.09	891.00	SVG	HMEQLC & CKING

SAS Enterprise Miner Report

Node=Reporter
Summary

Node id = Report
Node label = Reporter
Meta path =
Notes =

Node=Reporter
Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	Reporter		LiftChart	Y		basicoutput	Y	
Classification	Y		Nodes	ALL	PATH	headersize	8	
CompareMdl	Y		ShowAll	Y	N	textfont	Arial	
CrossTabs	Y		Style	LISTING	DEFAULT	textsize	6	
FitStat	Y		Summarization	Y		titlesize	10	
Format	PDF		VarRanking	Y				

End of Report