

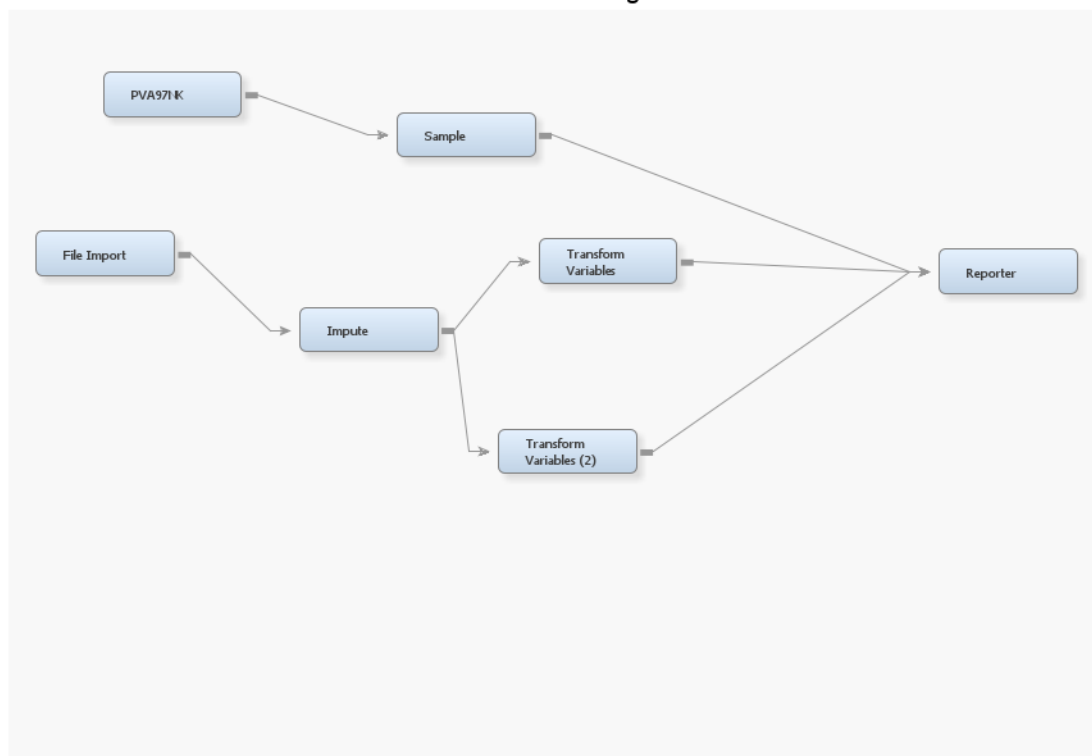
## SAS Enterprise Miner Report

User = u63340697  
Date = 13:59:27 August 12  
Project = Prac#2  
Diagram = myPrac2

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

Format = PDF  
Style = LISTING

### SAS Enterprise Miner Report Process Flow Diagram



SAS Enterprise Miner Report

Node=PVA97NK  
Summary

Node id = lds  
Node label = PVA97NK  
Meta path = lds  
Notes =

Node=PVA97NK  
Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	DataSource		DsCreatedBy	u63340697		NBytes	2098176	.
ApplyIntervalLevelLowerLimit	Y		DsId	pvan		NCols	28	.
ApplyMaxClassLevels	Y		DsModifiedBy	u63340697		NObs	9686	.
ApplyMaxPercentMissing	Y		DsModifyDate	2007449673.7		NewTable		
CMeta	WORK.M380T2R8		DsSampleName			NewVariableRole	REJECT	
ComputeStatistics	N		DsSampleSize			OutputType	VIEW	
DBPassThrough	Y		DsSampleSizeType			Role	RAW	TRAIN
Data	AAEM.PVA97NK		DsScope	LOCAL		Sample	D	
DataSelection	DATASOURCE		IdentifyEmptyColumns	Y		SampleSizeObs	10000	
DataSource	pvan		IntervalLowerLimit	20		SampleSizePercent	20	
DataSourceRole	RAW		Library	AAEM		SampleSizeType	PERCENT	
Description			MaxClassLevels	20		Scope	LOCAL	
DropMapVariables	Y		MaxPercentMissing	50		Segment		
DsCreateDate	2007449673.7		MetaAdvisor	BASIC		Table	PVA97NK	

Node=PVA97NK  
Data Attributes

Attribute	Value	Attribute	Value	Attribute	Value
Data Name	PVA97NK	Date Created	02Apr2012:18:02:37	Data Size	2098176
Data Type	DATA	Date Modified	02Apr2012:18:02:37	Role	RAW
Data Label		Number Rows	9686	Segment	
Engine	BASE	Number Columns	28	Data Library	AAEM

Node=PVA97NK  
Variables List

Name	Label	Role	Level	Type	Length	Format	Creator
DemAge	Age	INPUT	INTERVAL	N	8		
DemCluster	Demographic Cluster	INPUT	NOMINAL	C	2		
DemGender	Gender	INPUT	NOMINAL	C	3		
DemHomeOwner	Home Owner	INPUT	BINARY	C	3		
DemMedHomeValue	Median Home Value Region	INPUT	INTERVAL	N	8	DOLLAR11.0	
DemMedIncome	Median Income Region	INPUT	INTERVAL	N	8	DOLLAR11.0	
DemPctVeterans	Percent Veterans Region	INPUT	INTERVAL	N	8		
GiftAvg36	Gift Amount Average 36 Months	INPUT	INTERVAL	N	8	DOLLAR9.2	
GiftAvgAll	Gift Amount Average All Months	INPUT	INTERVAL	N	8	DOLLAR9.2	
GiftAvgCard36	Gift Amount Average Card 36 Months	INPUT	INTERVAL	N	8	DOLLAR9.2	
GiftAvgLast	Gift Amount Last	INPUT	INTERVAL	N	8	DOLLAR9.2	

Name	Label	Role	Level	Type	Length	Format	Creator
GiftCnt36	Gift Count 36 Months	INPUT	INTERVAL	N	8		
GiftCntAll	Gift Count All Months	INPUT	INTERVAL	N	8		
GiftCntCard36	Gift Count Card 36 Months	INPUT	INTERVAL	N	8		
GiftCntCardAll	Gift Count Card All Months	INPUT	INTERVAL	N	8		
GiftTimeFirst	Time Since First Gift	INPUT	INTERVAL	N	8		
GiftTimeLast	Time Since Last Gift	INPUT	INTERVAL	N	8		
ID	Control Number	ID	NOMINAL	C	8		
PromCnt12	Promotion Count 12 Months	INPUT	INTERVAL	N	8		
PromCnt36	Promotion Count 36 Months	INPUT	INTERVAL	N	8		
PromCntAll	Promotion Count All Months	INPUT	INTERVAL	N	8		
PromCntCard12	Promotion Count Card 12 Months	INPUT	INTERVAL	N	8		
PromCntCard36	Promotion Count Card 36 Months	INPUT	INTERVAL	N	8		
PromCntCardAll	Promotion Count Card All Months	INPUT	INTERVAL	N	8		
StatusCat96NK	Status Category 96NK	INPUT	NOMINAL	C	5		
StatusCatStarAll	Status Category Star All Months	INPUT	BINARY	N	8		
TargetB	Target Gift Flag	TARGET	BINARY	N	8		
TargetD	Target Gift Amount	REJECTED	INTERVAL	N	8	DOLLAR9.2	

SAS Enterprise Miner Report

Node=Sample  
Summary

Node id = Smpl  
Node label = Sample  
Meta path = lds => Smpl  
Notes =

Node=Sample  
Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	Sample		IgnoreSmallStrata	N		OutputType	DATA	
AdjustFreq	N		IntervalDistribution	Y		Pvalue	0.01	
Alpha	0.01		LevelProportion	100		RandomSeed	12345	
ClassDistribution	Y		LevelSampleProportion	50		SizeObs	.	
ClusterMethod	RANDOM		LevelSelection	EVENT		SizePercent	20	10
FreqCount	N		Method	RANDOM	DEFAULT	SizeType	PERCENT	
FreqMiss	N		MinStrataSize	5		StratifyCriterion	PROPORTIONAL	

Node=Sample  
Variable Summary

Role	Level	Frequency Count	Name
TARGET	BINARY	1	TargetB
REJECTED	INTERVAL	1	TargetD
INPUT	BINARY	2	DemHomeOwner StatusCatStarAll
INPUT	INTERVAL	20	DemAge DemMedHomeValue DemMedIncome DemPctVeterans GiftAvg36 GiftAvgAll GiftAvgCard36 GiftAvgLast GiftCnt36 GiftCntAll GiftCntCard36 GiftCntCardAll GiftTimeFirst GiftTimeLast PromCnt12 PromCnt36 ...
INPUT	NOMINAL	3	DemCluster DemGender StatusCat96NK
ID	NOMINAL	1	ID

SAS Enterprise Miner Report

Node=File Import  
Summary

Node id = FIMPORT  
Node label = File Import  
Meta path = FIMPORT  
Notes =

Node=File Import  
Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	FileImport		GuessRows	500		NameRow	Y	
AccessTable	NoTableName		IFileName	D:\2023s2\Unsupervised_learning\prac\week3\prac#2-sample.csv		Password	NoPassword	
AdvancedAdvisor	N		ImportType	Local	LOCAL	Role	TRAIN	
Delimiter	,		MaxCols	10000		SkipRows	0	
FileType	csv	XLS	MaxRows	1000000		Summarize	N	

Node=File Import  
Data Attributes

Attribute	Value	Attribute	Value	Attribute	Value
Data Name	FIMPORT_DATA	Date Created	12Aug2023:13:08:56	Data Size	525312
Data Type	DATA	Date Modified	12Aug2023:13:08:56	Role	TRAIN
Data Label		Number Rows	1937	Segment	
Engine	V9	Number Columns	29	Data Library	EMWS1

Node=File Import  
Variables List

Name	Label	Role	Level	Type	Length	Format	Creator
Age		INPUT	INTERVAL	N	8	BEST12.0	
Control_Number	Control Number	INPUT	INTERVAL	N	8	BEST12.0	
Demographic_Cluster	Demographic Cluster	INPUT	INTERVAL	N	8	BEST12.0	
Gender		INPUT	NOMINAL	C	1	\$1.	
Gift_Amount_Average_36_Months	Gift Amount Average 36 Months	INPUT	INTERVAL	N	8	BEST12.0	
Gift_Amount_Average_All_Months	Gift Amount Average All Months	INPUT	INTERVAL	N	8	BEST12.0	
Gift_Amount_Average_Card_36_Mont	Gift Amount Average Card 36 Mont	INPUT	INTERVAL	N	8	BEST12.0	
Gift_Amount_Last	Gift Amount Last	INPUT	INTERVAL	N	8	BEST12.0	
Gift_Count_36_Months	Gift Count 36 Months	INPUT	INTERVAL	N	8	BEST12.0	
Gift_Count_All_Months	Gift Count All Months	INPUT	INTERVAL	N	8	BEST12.0	
Gift_Count_Card_36_Months	Gift Count Card 36 Months	INPUT	INTERVAL	N	8	BEST12.0	
Gift_Count_Card_All_Months	Gift Count Card All Months	INPUT	INTERVAL	N	8	BEST12.0	
Home_Owner	Home Owner	INPUT	NOMINAL	C	1	\$1.	
Median_Home_Value_Region	Median Home Value Region	INPUT	INTERVAL	N	8	BEST12.0	
Median_Income_Region	Median Income Region	INPUT	INTERVAL	N	8	BEST12.0	
Observation_Number	Observation Number	INPUT	INTERVAL	N	8	BEST12.0	
Percent_Veterans_Region	Percent Veterans Region	INPUT	INTERVAL	N	8	BEST12.0	
Promotion_Count_12_Months	Promotion Count 12 Months	INPUT	INTERVAL	N	8	BEST12.0	
Promotion_Count_36_Months	Promotion Count 36 Months	INPUT	INTERVAL	N	8	BEST12.0	
Promotion_Count_All_Months	Promotion Count All Months	INPUT	INTERVAL	N	8	BEST12.0	

Name	Label	Role	Level	Type	Length	Format	Creator
Promotion_Count_Card_12_Months	Promotion Count Card 12 Months	INPUT	INTERVAL	N	8	BEST12.0	
Promotion_Count_Card_36_Months	Promotion Count Card 36 Months	INPUT	INTERVAL	N	8	BEST12.0	
Promotion_Count_Card_All_Months	Promotion Count Card All Months	INPUT	INTERVAL	N	8	BEST12.0	
Status_Category_96NK	Status Category 96NK	INPUT	NOMINAL	C	1	\$1.	
Status_Category_Star_All_Months	Status Category Star All Months	INPUT	INTERVAL	N	8	BEST12.0	
Target_Gift_Amount	Target Gift Amount	TARGET	INTERVAL	N	8	BEST12.0	
Time_Since_First_Gift	Time Since First Gift	INPUT	INTERVAL	N	8	BEST12.0	
Time_Since_Last_Gift	Time Since Last Gift	INPUT	INTERVAL	N	8	BEST12.0	
VAR1	Target Gift Flag	INPUT	INTERVAL	N	8	BEST12.0	

Node=File Import  
Created Variables List

SAS Enterprise Miner Report

Node=Impute  
Summary

Node id = Impt  
Node label = Impute  
Meta path = FIMPORT => Impt  
Notes =

Node=Impute  
Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	Impute		IndicatorRole	REJECTED		MinCatSize	5	
ABWTuning	9		IndicatorSource	IMPUTED		Normalize	N	Y
AHUBERTuning	1.5		LeafSize	5		Nrules	5	
AWAVETuning	6.2831853072		MaxPctMissing	50		Nsurrs	2	
DefaultChar			Maxbranch	2		RandomSeed	12345	
DefaultNum	.		Maxdepth	6		ReplaceVariable	N	
DistributionMissing	N		MethodClass	COUNT		SpacingProportion	90	
HideVariable	Y		MethodInterval	MEAN		Splitsize	.	
ImputeNoMissing	N		MethodTargetClass	COUNT	NONE	ValidateTestMissing	N	
Indicator	NONE		MethodTargetInterval	MEAN	NONE			

Node=Impute  
Variable Summary

Role	Level	Frequency Count	Name
INPUT	INTERVAL	25	Age Control_Number Demographic_Cluster Gift_Amount_Average_36_Months Gift_Amount_Average_All_Months Gift_Amount_Average_Card_36_Mont Gift_Amount_Last Gift_Count_36_Months Gift_Count_All_Months ...
INPUT	NOMINAL	3	Gender Home_Owner Status_Category_96NK

Node=Impute  
Imputation Summary

Variable Name	Impute Method	Imputed Variable	Impute Value	Role	Measurement Level	Label	Number of Missing for TRAIN
Age	MEAN	IMP_Age	59.0143	INPUT	INTERVAL		464
Gift_Amount_Average_Card_36_Mont	MEAN	IMP_Gift_Amount_Average_Card_36_	14.0720	INPUT	INTERVAL	Gift Amount Average Card 36 Mont	360
Target_Gift_Amount	MEAN	IMP_Target_Gift_Amount	15.6055	TARGET	INTERVAL	Target Gift Amount	961

SAS Enterprise Miner Report

Node=Transform Variables  
Summary

Node id = Trans  
Node label = Transform Variables  
Meta path = FIMPORT => Impt => Trans  
Notes =

Node=Transform Variables  
Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	Transform		EmSampleSize	DEFAULT		MissingValue	USEINSEARCH	
DefaultClassMethod	NONE		GroupCutoff	0.1		NumberofBins	VARIABLES	
DefaultClassTargetMethod	NONE		GroupMissing	N		Offset	1	
DefaultMethod	STANDARDIZE	NONE	HideVariable	Y		RejectVariable	Y	
DefaultTargetMethod	NONE		MaxOptimalBins	4		SummaryStatistics	Y	
EmRandomSeed	12345		MinOffset	Y		SummaryVariables	TRANSFORMED	
EmSampleMethod	FIRSTN		MissingAsLevel	N		UseMetaTransform	Y	

Node=Transform Variables  
Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	IMP_Target_Gift_Amount
INPUT	INTERVAL	25	Control_Number Demographic_Cluster Gift_Amount_Average_36_Months Gift_Amount_Average_All_Months Gift_Amount_Last Gift_Count_36_Months Gift_Count_All_Months Gift_Count_Card_36_Months ... IMP_Age
INPUT	NOMINAL	3	Gender Home_Owner Status_Category_96NK

Node=Transform Variables  
Transformations Statistics



Source	Method	Variable Name	Formula
Input	Original	Control_Number	
Input	Original	Demographic_Cluster	
Input	Original	Gift_Amount_Average_36_Months	
Input	Original	Gift_Amount_Average_All_Months	
Input	Original	Gift_Amount_Last	
Input	Original	Gift_Count_36_Months	
Input	Original	Gift_Count_All_Months	
Input	Original	Gift_Count_Card_36_Months	
Input	Original	Gift_Count_Card_All_Months	
Input	Original	IMP_Age	
Input	Original	IMP_Gift_Amount_Average_Card_36_	
Input	Original	Median_Home_Value_Region	
Input	Original	Median_Income_Region	
Input	Original	Observation_Number	
Input	Original	Percent_Veterans_Region	
Input	Original	Promotion_Count_12_Months	
Input	Original	Promotion_Count_36_Months	
Input	Original	Promotion_Count_All_Months	
Input	Original	Promotion_Count_Card_12_Months	
Input	Original	Promotion_Count_Card_36_Months	
Input	Original	Promotion_Count_Card_All_Months	
Input	Original	Status_Category_Star_All_Months	
Input	Original	Time_Since_First_Gift	

Number of Levels	Non Missing	Missing	Minimum	Maximum	Mean	Standard Deviation	Skewness	Kurtosis	Label
.	1937	0	71.0000	191779.00	97643.41	57086.75	-0.0692	-1.222	Control Number
.	1937	0	0.0000	53.00	27.34	14.86	-0.1175	-1.136	Demographic Cluster
.	1937	0	0.0000	260.00	14.82	10.40	8.2797	165.359	Gift Amount Average 36 Months
.	1937	0	2.4400	138.75	12.43	7.83	4.5328	48.958	Gift Amount Average All Months
.	1937	0	0.0000	100.00	15.77	9.66	2.7749	16.084	Gift Amount Last
.	1937	0	0.0000	15.00	3.24	2.19	1.2360	1.732	Gift Count 36 Months
.	1937	0	1.0000	91.00	10.68	9.15	1.7893	5.724	Gift Count All Months
.	1937	0	0.0000	8.00	1.87	1.62	1.1049	1.006	Gift Count Card 36 Months
.	1937	0	0.0000	28.00	5.64	4.75	1.2956	1.780	Gift Count Card All Months
.	1937	0	6.0000	87.00	59.01	14.27	-0.4248	0.253	Imputed Age
.	1937	0	1.3300	260.00	14.07	9.68	10.2699	224.452	Imputed: Gift Amount Average Card 36 Mont
.	1937	0	0.0000	595100.00	108891.38	95402.72	2.3762	6.569	Median Home Value Region
.	1937	0	0.0000	200001.00	40420.75	28921.16	0.3395	0.716	Median Income Region
.	1937	0	5.0000	9681.00	4938.97	2782.05	-0.0071	-1.182	Observation Number
.	1937	0	0.0000	73.00	30.31	11.63	-0.3111	0.907	Percent Veterans Region
.	1937	0	3.0000	59.00	13.10	5.09	2.8807	11.825	Promotion Count 12 Months
.	1937	0	7.0000	78.00	29.44	8.01	0.3492	2.231	Promotion Count 36 Months
.	1937	0	7.0000	174.00	48.86	23.46	0.5183	0.496	Promotion Count All Months
.	1937	0	1.0000	13.00	5.42	1.34	0.7733	4.850	Promotion Count Card 12 Months
.	1937	0	2.0000	24.00	12.03	4.64	-0.4395	-1.024	Promotion Count Card 36 Months
.	1937	0	3.0000	55.00	19.12	8.64	0.1470	-0.662	Promotion Count Card All Months
.	1937	0	0.0000	1.00	0.55	0.50	-0.1941	-1.964	Status Category Star All Months
.	1937	0	15.0000	230.00	71.46	37.91	0.1759	-1.229	Time Since First Gift

Source	Method	Variable Name	Formula
Input	Original	Time_Since_Last_Gift	
Input	Original	VAR1	
Output	Computed	STD_Control_Number	(Control_Number - 97643.407331) / 57086.746332
Output	Computed	STD_Demographic_Cluster	(Demographic_Cluster - 27.337119257) / 14.859063467
Output	Computed	STD_Gift_Amount_Average_36_Month	(Gift_Amount_Average_36_Months - 14.818580279) / 10.401729821
Output	Computed	STD_Gift_Amount_Average_All_Mont	(Gift_Amount_Average_All_Months - 12.431724316) / 7.8326010148
Output	Computed	STD_Gift_Amount_Last	(Gift_Amount_Last - 15.767429014) / 9.6570837807
Output	Computed	STD_Gift_Count_36_Months	(Gift_Count_36_Months - 3.2385131647) / 2.1933651499
Output	Computed	STD_Gift_Count_All_Months	(Gift_Count_All_Months - 10.68043366) / 9.1487136237
Output	Computed	STD_Gift_Count_Card_36_Months	(Gift_Count_Card_36_Months - 1.8719669592) / 1.6218178961
Output	Computed	STD_Gift_Count_Card_All_Months	(Gift_Count_Card_All_Months - 5.6391326794) / 4.7517261839
Output	Computed	STD_IMP_Age	(IMP_Age - 59.014256619) / 14.273101845
Output	Computed	STD_IMP_Gift_Amount_Average_Card	(IMP_Gift_Amount_Average_Card_36_ - 14.071991122) / 9.6771633856
Output	Computed	STD_Median_Home_Value_Region	(Median_Home_Value_Region - 108891.37842) / 95402.719605
Output	Computed	STD_Median_Income_Region	(Median_Income_Region - 40420.747031) / 28921.156668
Output	Computed	STD_Observation_Number	(Observation_Number - 4938.9690243) / 2782.0503749
Output	Computed	STD_Percent_Veterans_Region	(Percent_Veterans_Region - 30.305110996) / 11.625853728
Output	Computed	STD_Promotion_Count_12_Months	(Promotion_Count_12_Months - 13.10273619) / 5.0892121511
Output	Computed	STD_Promotion_Count_36_Months	(Promotion_Count_36_Months - 29.440887971) / 8.0085659742
Output	Computed	STD_Promotion_Count_All_Months	(Promotion_Count_All_Months - 48.863190501) / 23.455544657
Output	Computed	STD_Promotion_Count_Card_12_Mont	(Promotion_Count_Card_12_Months - 5.4238513165) / 1.3370549521
Output	Computed	STD_Promotion_Count_Card_36_Mont	(Promotion_Count_Card_36_Months - 12.026845638) / 4.6381794587
Output	Computed	STD_Promotion_Count_Card_All_Mon	(Promotion_Count_Card_All_Months - 19.122870418) / 8.6412891708

Number of Levels	Non Missing	Missing	Minimum	Maximum	Mean	Standard Deviation	Skewness	Kurtosis	Label
.	1937	0	4.0000	27.00	18.09	4.15	-0.7778	2.286	Time Since Last Gift
.	1937	0	0.0000	1.00	0.50	0.50	-0.0155	-2.002	错靶target Gift Flag
.	1937	0	-1.7092	1.65	-0.00	1.00	-0.0692	-1.222	Transformed: Control Number
.	1937	0	-1.8398	1.73	-0.00	1.00	-0.1175	-1.136	Transformed: Demographic Cluster
.	1937	0	-1.4246	23.57	-0.00	1.00	8.2797	165.359	Transformed: Gift Amount Average 36 Months
.	1937	0	-1.2757	16.13	-0.00	1.00	4.5328	48.958	Transformed: Gift Amount Average All Months
.	1937	0	-1.6327	8.72	-0.00	1.00	2.7749	16.084	Transformed: Gift Amount Last
.	1937	0	-1.4765	5.36	-0.00	1.00	1.2360	1.732	Transformed: Gift Count 36 Months
.	1937	0	-1.0581	8.78	0.00	1.00	1.7893	5.724	Transformed: Gift Count All Months
.	1937	0	-1.1542	3.78	0.00	1.00	1.1049	1.006	Transformed: Gift Count Card 36 Months
.	1937	0	-1.1868	4.71	0.00	1.00	1.2956	1.780	Transformed: Gift Count Card All Months
.	1937	0	-3.7143	1.96	0.00	1.00	-0.4248	0.253	Transformed: Imputed Age
.	1937	0	-1.3167	25.41	0.00	1.00	10.2699	224.452	Transformed: Imputed: Gift Amount Average Ca
.	1937	0	-1.1414	5.10	0.00	1.00	2.3762	6.569	Transformed: Median Home Value Region
.	1937	0	-1.3976	5.52	0.00	1.00	0.3395	0.716	Transformed: Median Income Region
.	1937	0	-1.7735	1.70	-0.00	1.00	-0.0071	-1.182	Transformed: Observation Number
.	1937	0	-2.6067	3.67	0.00	1.00	-0.3111	0.907	Transformed: Percent Veterans Region
.	1937	0	-1.9851	9.02	-0.00	1.00	2.8807	11.825	Transformed: Promotion Count 12 Months
.	1937	0	-2.8021	6.06	0.00	1.00	0.3492	2.231	Transformed: Promotion Count 36 Months
.	1937	0	-1.7848	5.34	-0.00	1.00	0.5183	0.496	Transformed: Promotion Count All Months
.	1937	0	-3.3087	5.67	-0.00	1.00	0.7733	4.850	Transformed: Promotion Count Card 12 Months
.	1937	0	-2.1618	2.58	-0.00	1.00	-0.4395	-1.024	Transformed: Promotion Count Card 36 Months
.	1937	0	-1.8658	4.15	0.00	1.00	0.1470	-0.662	Transformed: Promotion Count Card All Months

Source	Method	Variable Name	Formula
Output	Computed	STD_Status_Category_Star_All_Mon	(Status_Category_Star_All_Months - 0.5482705214) / 0.4977930147
Output	Computed	STD_Time_Since_First_Gift	(Time_Since_First_Gift - 71.463087248) / 37.914578922
Output	Computed	STD_Time_Since_Last_Gift	(Time_Since_Last_Gift - 18.092410945) / 4.1540865597
Output	Computed	STD_VAR1	(VAR1 - 0.503871967) / 0.5001141193

Number of Levels	Non Missing	Missing	Minimum	Maximum	Mean	Standard Deviation	Skewness	Kurtosis	Label
.	1937	0	-1.1014	0.91	0.00	1.00	-0.1941	-1.964	Transformed: Status Category Star All Months
.	1937	0	-1.4892	4.18	0.00	1.00	0.1759	-1.229	Transformed: Time Since First Gift
.	1937	0	-3.3924	2.14	-0.00	1.00	-0.7778	2.286	Transformed: Time Since Last Gift
.	1937	0	-1.0075	0.99	-0.00	1.00	-0.0155	-2.002	Transformed: 错误target Gift Flag

## SAS Enterprise Miner Report

### Node=Transform Variables (2) Summary

Node id = Trans2  
Node label = Transform Variables (2)  
Meta path = FIMPORT => Impt => Trans2  
Notes =

### Node=Transform Variables (2) Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	Transform		EmSampleSize	DEFAULT		MissingValue	USEINSEARCH	
DefaultClassMethod	NONE		GroupCutoff	0.1		NumberofBins	VARIABLES	
DefaultClassTargetMethod	NONE		GroupMissing	N		Offset	1	
DefaultMethod	RANGE	NONE	HideVariable	Y		RejectVariable	Y	
DefaultTargetMethod	RANGE	NONE	MaxOptimalBins	4		SummaryStatistics	Y	
EmRandomSeed	12345		MinOffset	Y		SummaryVariables	TRANSFORMED	
EmSampleMethod	FIRSTN		MissingAsLevel	N		UseMetaTransform	Y	

### Node=Transform Variables (2) Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	IMP_Target_Gift_Amount
INPUT	INTERVAL	25	Control_Number Demographic_Cluster Gift_Amount_Average_36_Months Gift_Amount_Average_All_Months Gift_Amount_Last Gift_Count_36_Months Gift_Count_All_Months Gift_Count_Card_36_Months ... IMP_Age
INPUT	NOMINAL	3	Gender Home_Owner Status_Category_96NK

### Node=Transform Variables (2) Transformations Statistics

Source	Method	Variable Name	Formula	Number of Levels
Input	Original	Control_Number		.
Input	Original	Demographic_Cluster		.
Input	Original	Gift_Amount_Average_36_Months		.
Input	Original	Gift_Amount_Average_All_Months		.
Input	Original	Gift_Amount_Last		.
Input	Original	Gift_Count_36_Months		.
Input	Original	Gift_Count_All_Months		.
Input	Original	Gift_Count_Card_36_Months		.
Input	Original	Gift_Count_Card_All_Months		.
Input	Original	IMP_Age		.
Input	Original	IMP_Gift_Amount_Average_Card_36_		.
Input	Original	IMP_Target_Gift_Amount		.
Input	Original	Median_Home_Value_Region		.
Input	Original	Median_Income_Region		.
Input	Original	Observation_Number		.
Input	Original	Percent_Veterans_Region		.
Input	Original	Promotion_Count_12_Months		.
Input	Original	Promotion_Count_36_Months		.
Input	Original	Promotion_Count_All_Months		.
Input	Original	Promotion_Count_Card_12_Months		.
Input	Original	Promotion_Count_Card_36_Months		.
Input	Original	Promotion_Count_Card_All_Months		.
Input	Original	Status_Category_Star_All_Months		.

Non Missing	Missing	Minimum	Maximum	Mean	Standard Deviation	Skewness	Kurtosis	Label
1937	0	71.00	191779.00	97643.41	57086.75	-0.0692	-1.222	Control Number
1937	0	0.00	53.00	27.34	14.86	-0.1175	-1.136	Demographic Cluster
1937	0	0.00	260.00	14.82	10.40	8.2797	165.359	Gift Amount Average 36 Months
1937	0	2.44	138.75	12.43	7.83	4.5328	48.958	Gift Amount Average All Months
1937	0	0.00	100.00	15.77	9.66	2.7749	16.084	Gift Amount Last
1937	0	0.00	15.00	3.24	2.19	1.2360	1.732	Gift Count 36 Months
1937	0	1.00	91.00	10.68	9.15	1.7893	5.724	Gift Count All Months
1937	0	0.00	8.00	1.87	1.62	1.1049	1.006	Gift Count Card 36 Months
1937	0	0.00	28.00	5.64	4.75	1.2956	1.780	Gift Count Card All Months
1937	0	6.00	87.00	59.01	14.27	-0.4248	0.253	Imputed Age
1937	0	1.33	260.00	14.07	9.68	10.2699	224.452	Imputed: Gift Amount Average Card 36 Mont
1937	0	1.00	200.00	15.61	8.96	8.1268	129.989	Imputed: Target Gift Amount
1937	0	0.00	595100.00	108891.38	95402.72	2.3762	6.569	Median Home Value Region
1937	0	0.00	200001.00	40420.75	28921.16	0.3395	0.716	Median Income Region
1937	0	5.00	9681.00	4938.97	2782.05	-0.0071	-1.182	Observation Number
1937	0	0.00	73.00	30.31	11.63	-0.3111	0.907	Percent Veterans Region
1937	0	3.00	59.00	13.10	5.09	2.8807	11.825	Promotion Count 12 Months
1937	0	7.00	78.00	29.44	8.01	0.3492	2.231	Promotion Count 36 Months
1937	0	7.00	174.00	48.86	23.46	0.5183	0.496	Promotion Count All Months
1937	0	1.00	13.00	5.42	1.34	0.7733	4.850	Promotion Count Card 12 Months
1937	0	2.00	24.00	12.03	4.64	-0.4395	-1.024	Promotion Count Card 36 Months
1937	0	3.00	55.00	19.12	8.64	0.1470	-0.662	Promotion Count Card All Months
1937	0	0.00	1.00	0.55	0.50	-0.1941	-1.964	Status Category Star All Months

Source	Method	Variable Name	Formula	Number of Levels
Input	Original	Time_Since_First_Gift		.
Input	Original	Time_Since_Last_Gift		.
Input	Original	VAR1		.
Output	Computed	RANGE_Control_Number	(Control_Number - 71) / (191779-71)	.
Output	Computed	RANGE_Demographic_Cluster	(Demographic_Cluster - 0) / (53-0)	.
Output	Computed	RANGE_Gift_Amount_Average_36_Mon	(Gift_Amount_Average_36_Months - 0) / (260-0)	.
Output	Computed	RANGE_Gift_Amount_Average_All_Mo	(Gift_Amount_Average_All_Months - 2.44) / (138.75-2.44)	.
Output	Computed	RANGE_Gift_Amount_Last	(Gift_Amount_Last - 0) / (100-0)	.
Output	Computed	RANGE_Gift_Count_36_Months	(Gift_Count_36_Months - 0) / (15-0)	.
Output	Computed	RANGE_Gift_Count_All_Months	(Gift_Count_All_Months - 1) / (91-1)	.
Output	Computed	RANGE_Gift_Count_Card_36_Months	(Gift_Count_Card_36_Months - 0) / (8-0)	.
Output	Computed	RANGE_Gift_Count_Card_All_Months	(Gift_Count_Card_All_Months - 0) / (28-0)	.
Output	Computed	RANGE_IMP_Age	(IMP_Age - 6) / (87-6)	.
Output	Computed	RANGE_IMP_Gift_Amount_Average_Ca	(IMP_Gift_Amount_Average_Card_36_ - 1.33) / (260-1.33)	.
Output	Computed	RANGE_IMP_Target_Gift_Amount	(IMP_Target_Gift_Amount - 1) / (200-1)	.
Output	Computed	RANGE_Median_Home_Value_Region	(Median_Home_Value_Region - 0) / (595100-0)	.
Output	Computed	RANGE_Median_Income_Region	(Median_Income_Region - 0) / (200001-0)	.
Output	Computed	RANGE_Observation_Number	(Observation_Number - 5) / (9681-5)	.
Output	Computed	RANGE_Percent_Veterans_Region	(Percent_Veterans_Region - 0) / (73-0)	.
Output	Computed	RANGE_Promotion_Count_12_Months	(Promotion_Count_12_Months - 3) / (59-3)	.
Output	Computed	RANGE_Promotion_Count_36_Months	(Promotion_Count_36_Months - 7) / (78-7)	.
Output	Computed	RANGE_Promotion_Count_All_Months	(Promotion_Count_All_Months - 7) / (174-7)	.
Output	Computed	RANGE_Promotion_Count_Card_12_Mo	(Promotion_Count_Card_12_Months - 1) / (13-1)	.

Non Missing	Missing	Minimum	Maximum	Mean	Standard Deviation	Skewness	Kurtosis	Label
1937	0	15.00	230.00	71.46	37.91	0.1759	-1.229	Time Since First Gift
1937	0	4.00	27.00	18.09	4.15	-0.7778	2.286	Time Since Last Gift
1937	0	0.00	1.00	0.50	0.50	-0.0155	-2.002	Missing Target Gift Flag
1937	0	0.00	1.00	0.51	0.30	-0.0692	-1.222	Transformed: Control Number
1937	0	0.00	1.00	0.52	0.28	-0.1175	-1.136	Transformed: Demographic Cluster
1937	0	0.00	1.00	0.06	0.04	8.2797	165.359	Transformed: Gift Amount Average 36 Months
1937	0	0.00	1.00	0.07	0.06	4.5328	48.958	Transformed: Gift Amount Average All Months
1937	0	0.00	1.00	0.16	0.10	2.7749	16.084	Transformed: Gift Amount Last
1937	0	0.00	1.00	0.22	0.15	1.2360	1.732	Transformed: Gift Count 36 Months
1937	0	0.00	1.00	0.11	0.10	1.7893	5.724	Transformed: Gift Count All Months
1937	0	0.00	1.00	0.23	0.20	1.1049	1.006	Transformed: Gift Count Card 36 Months
1937	0	0.00	1.00	0.20	0.17	1.2956	1.780	Transformed: Gift Count Card All Months
1937	0	0.00	1.00	0.65	0.18	-0.4248	0.253	Transformed: Imputed Age
1937	0	0.00	1.00	0.05	0.04	10.2699	224.452	Transformed: Imputed: Gift Amount Average Ca
1937	0	0.00	1.00	0.07	0.05	8.1268	129.989	Transformed: Imputed: Target Gift Amount
1937	0	0.00	1.00	0.18	0.16	2.3762	6.569	Transformed: Median Home Value Region
1937	0	0.00	1.00	0.20	0.14	0.3395	0.716	Transformed: Median Income Region
1937	0	0.00	1.00	0.51	0.29	-0.0071	-1.182	Transformed: Observation Number
1937	0	0.00	1.00	0.42	0.16	-0.3111	0.907	Transformed: Percent Veterans Region
1937	0	0.00	1.00	0.18	0.09	2.8807	11.825	Transformed: Promotion Count 12 Months
1937	0	0.00	1.00	0.32	0.11	0.3492	2.231	Transformed: Promotion Count 36 Months
1937	0	0.00	1.00	0.25	0.14	0.5183	0.496	Transformed: Promotion Count All Months
1937	0	0.00	1.00	0.37	0.11	0.7733	4.850	Transformed: Promotion Count Card 12 Months

Source	Method	Variable Name	Formula	Number of Levels
Output	Computed	RANGE_Promotion_Count_Card_36_Mo	$(\text{Promotion\_Count\_Card\_36\_Months} - 2) / (24-2)$	.
Output	Computed	RANGE_Promotion_Count_Card_All_M	$(\text{Promotion\_Count\_Card\_All\_Months} - 3) / (55-3)$	.
Output	Computed	RANGE_Status_Category_Star_All_M	$(\text{Status\_Category\_Star\_All\_Months} - 0) / (1-0)$	.
Output	Computed	RANGE_Time_Since_First_Gift	$(\text{Time\_Since\_First\_Gift} - 15) / (230-15)$	.
Output	Computed	RANGE_Time_Since_Last_Gift	$(\text{Time\_Since\_Last\_Gift} - 4) / (27-4)$	.
Output	Computed	RANGE_VAR1	$(\text{VAR1} - 0) / (1-0)$	.

Non Missing	Missing	Minimum	Maximum	Mean	Standard Deviation	Skewness	Kurtosis	Label
1937	0	0.00	1.00	0.46	0.21	-0.4395	-1.024	Transformed: Promotion Count Card 36 Months
1937	0	0.00	1.00	0.31	0.17	0.1470	-0.662	Transformed: Promotion Count Card All Months
1937	0	0.00	1.00	0.55	0.50	-0.1941	-1.964	Transformed: Status Category Star All Months
1937	0	0.00	1.00	0.26	0.18	0.1759	-1.229	Transformed: Time Since First Gift
1937	0	0.00	1.00	0.61	0.18	-0.7778	2.286	Transformed: Time Since Last Gift
1937	0	0.00	1.00	0.50	0.50	-0.0155	-2.002	Transformed: 错误Target Gift Flag

End of Report