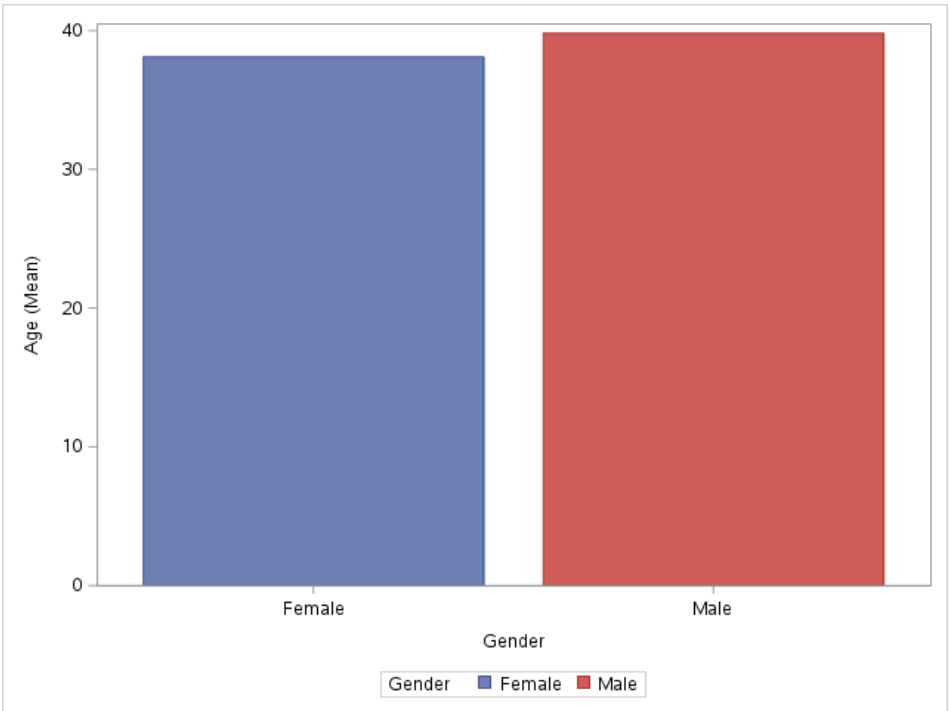
Data Set Name	WORK.MARKET_ANALYSIS	**Observations**	200
Member Type	DATA	**Variables**	5
Engine	V9	**Indexes**	0
Created	14/02/2023 13:47:12	**Observation Length**	40
Last Modified	14/02/2023 13:47:12	**Deleted Observations**	0
Protection		**Compressed**	NO
Data Set Type		**Sorted**	NO
Label			
Data Representation	SOLARIS_X86_64, LINUX_X86_64, ALPHA_TRU64, LINUX_IA64		
Encoding	utf-8 Unicode (UTF-8)		

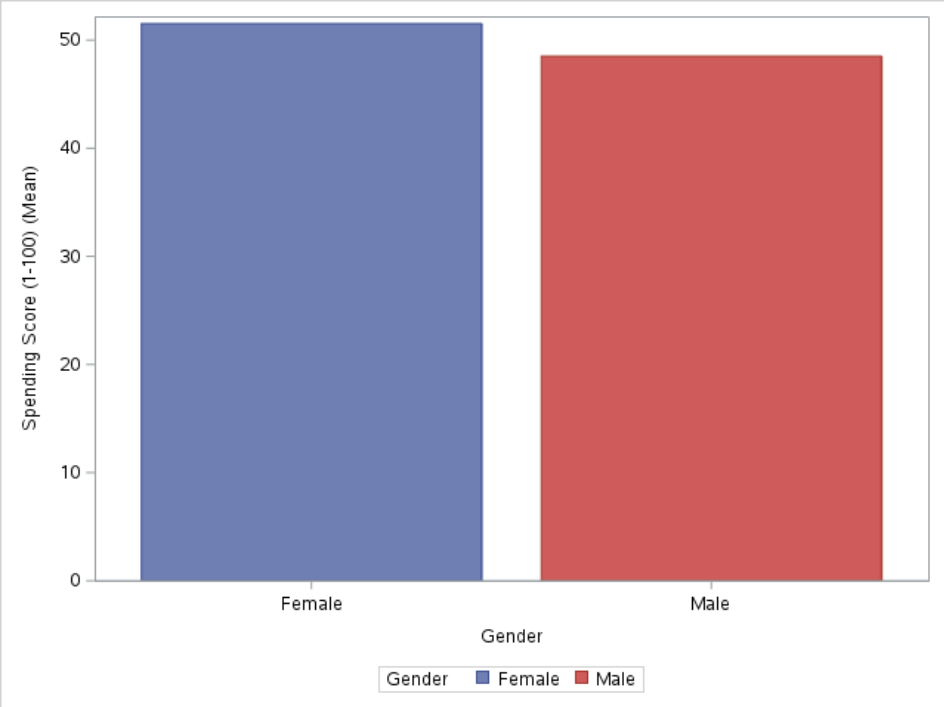
Engine/Host Dependent Information	
Data Set Page Size	131072
Number of Data Set Pages	1
First Data Page	1
Max Obs per Page	3265
Obs in First Data Page	200
Number of Data Set Repairs	0
Filename	/saswork/SAS_work300B00017498_odaws02-usw2-2.oda.sas.com/SAS_work0B2B00017498_odaws02-usw2-2.oda.sas.com/market_analysis.sas7bdat
Release Created	9.0401M7
Host Created	Linux
Inode Number	268435547
Access Permission	rw-r--r--
Owner Name	u63109530
File Size	256KB
File Size (bytes)	262144

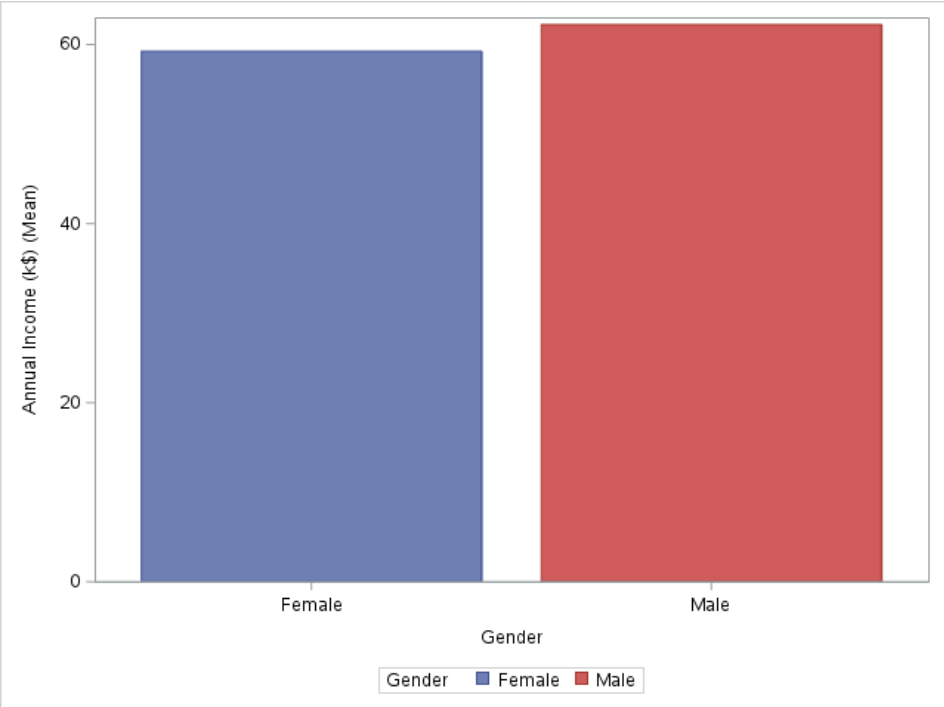
Alphabetic List of Variables and Attributes

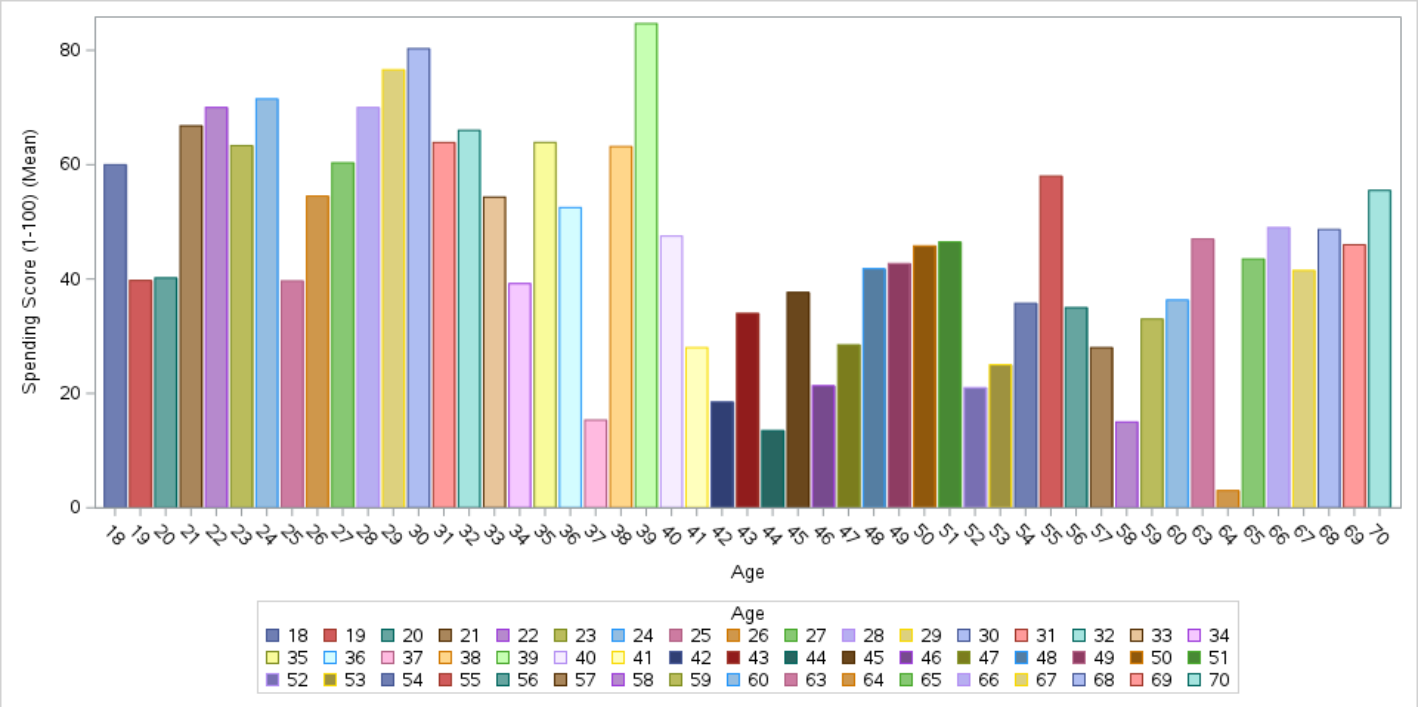
#	Variable	Type	Len	Format	Informat
3	Age	Num	8	BEST12.	BEST32.
4	Annual Income (k$)	Num	8	BEST12.	BEST32.
1	CustomerID	Num	8	BEST12.	BEST32.
2	Gender	Char	6	$6.	$6.
5	Spending Score (1-100)	Num	8	BEST12.	BEST32.

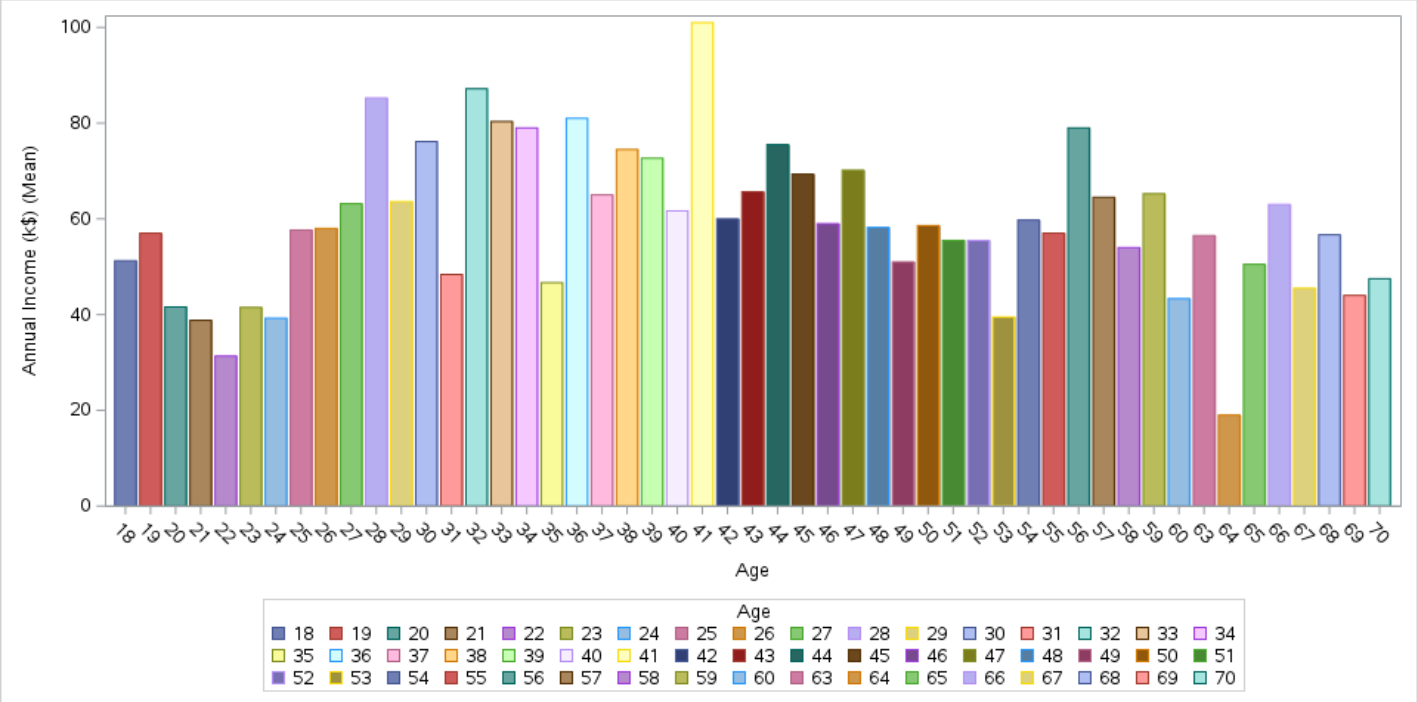
Variable	N	Mean	Std Dev	Minimum	Maximum
CustomerID	200	100.5000000	57.8791845	1.0000000	200.0000000
Age	200	38.8500000	13.9690073	18.0000000	70.0000000
Annual Income (k$)	200	60.5600000	26.2647212	15.0000000	137.0000000
Spending Score (1-100)	200	50.2000000	25.8235217	1.0000000	99.0000000




Spending Score (1-100) (Mean)
50
40
30
20
10
0
Female
Male
Gender
Gender Female Male


Annual Income (k$) (Mean)
60
40
20
0
Female
Male
Gender
Gender Female Male





Observations	200
Variables	3

Simple Statistics

	Age	Annual Income (k$)	Spending Score (1-100)
Mean	38.85000000	60.56000000	50.20000000
StD	13.96900733	26.26472117	25.82352167

Correlation Matrix

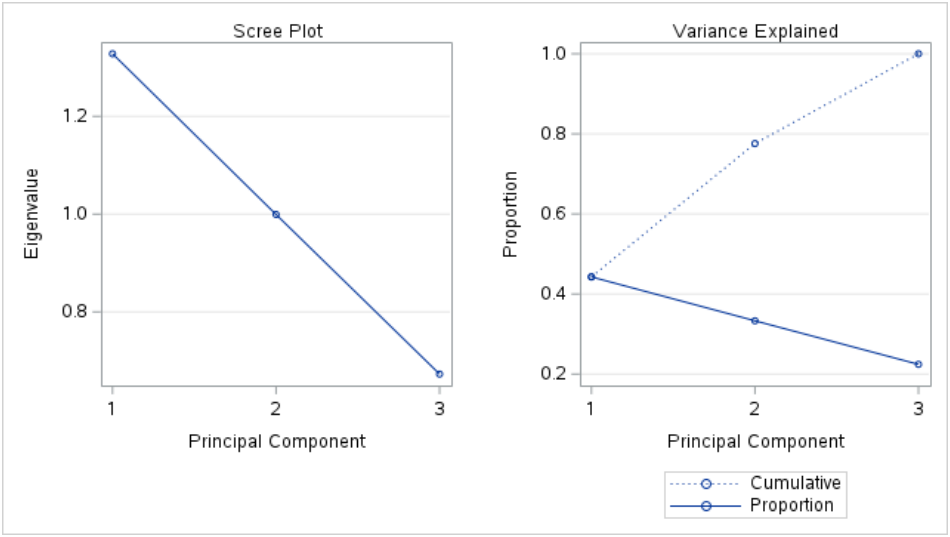
	Age	Annual Income (k$)	Spending Score (1-100)
Age	1.0000	-.0124	-.3272
Annual Income (k$)	-.0124	1.0000	0.0099
Spending Score (1-100)	-.3272	0.0099	1.0000

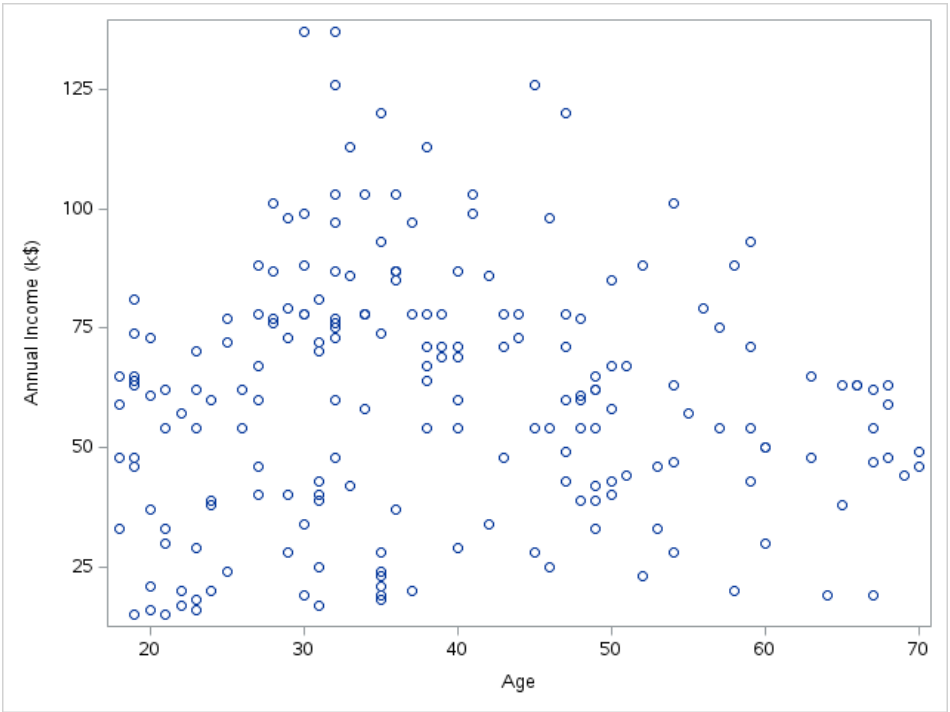
Eigenvalues of the Correlation Matrix

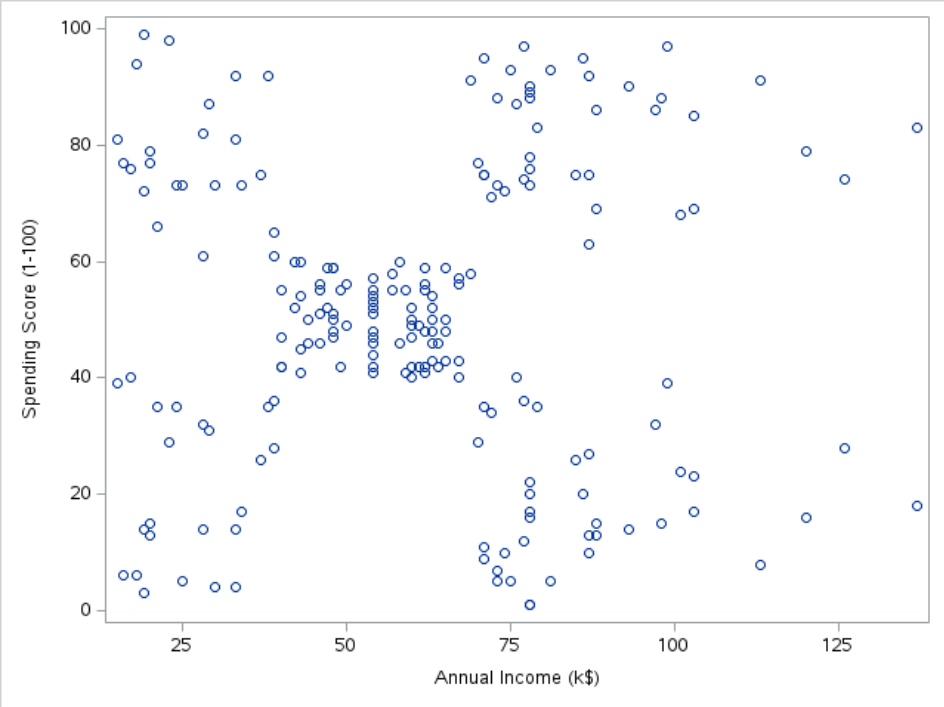
	Eigenvalue	Difference	Proportion	Cumulative
1	1.32798502	0.32873366	0.4427	0.4427
2	0.99925135	0.32648772	0.3331	0.7757

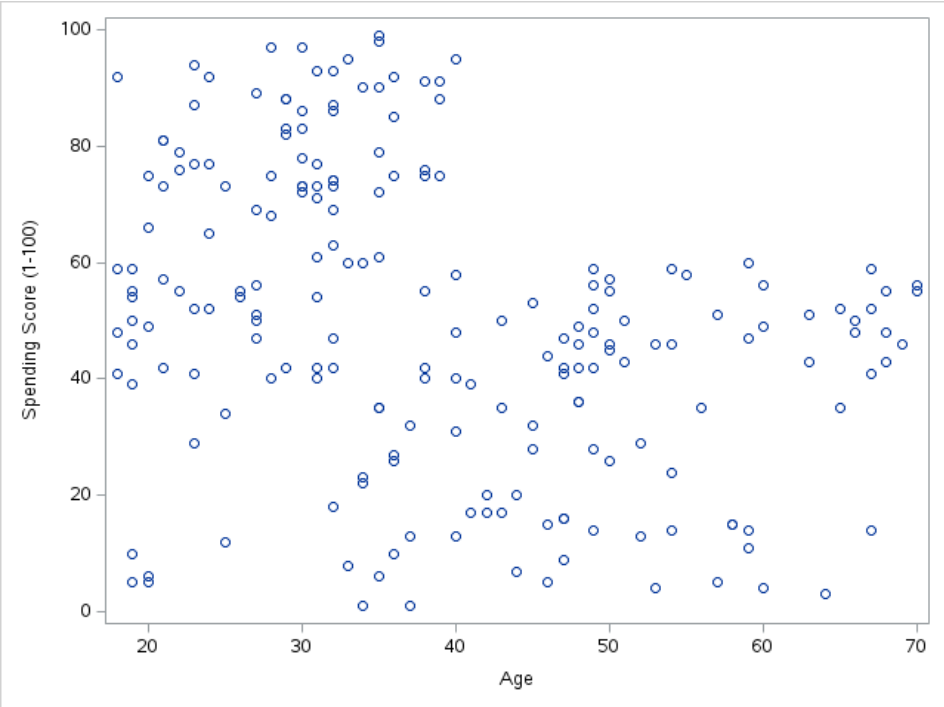
Eigenvalues of the Correlation Matrix				
	Eigenvalue	Difference	Proportion	Cumulative
3	0.67276363		0.2243	1.0000

Eigenvectors			
	Prin1	Prin2	Prin3
Age	-.706382	0.030141	0.707188
Annual Income (k$)	0.048024	0.998832	0.005398
Spending Score (1-100)	0.706199	-.037775	0.707005









Variable	N	N Miss	Mean	Median	Maximum	Minimum
CustomerID	200	0	100.5000000	100.5000000	200.0000000	1.0000000
Age	200	0	38.8500000	36.0000000	70.0000000	18.0000000
Annual Income (k$)	200	0	60.5600000	61.5000000	137.0000000	15.0000000
Spending Score (1-100)	200	0	50.2000000	50.0000000	99.0000000	1.0000000

Eigenvalues of the Covariance Matrix				
	Eigenvalue	Difference	Proportion	Cumulative
1	691.654605	26.619361	0.5098	0.5098
2	665.035244		0.4902	1.0000

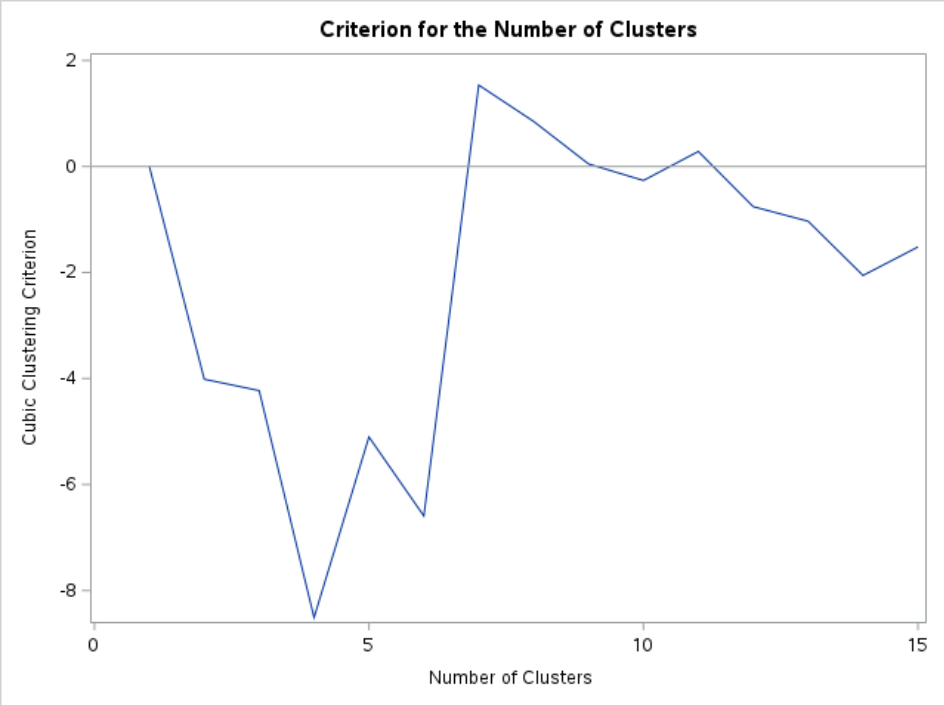
Root-Mean-Square Total-Sample Standard Deviation	26.04506

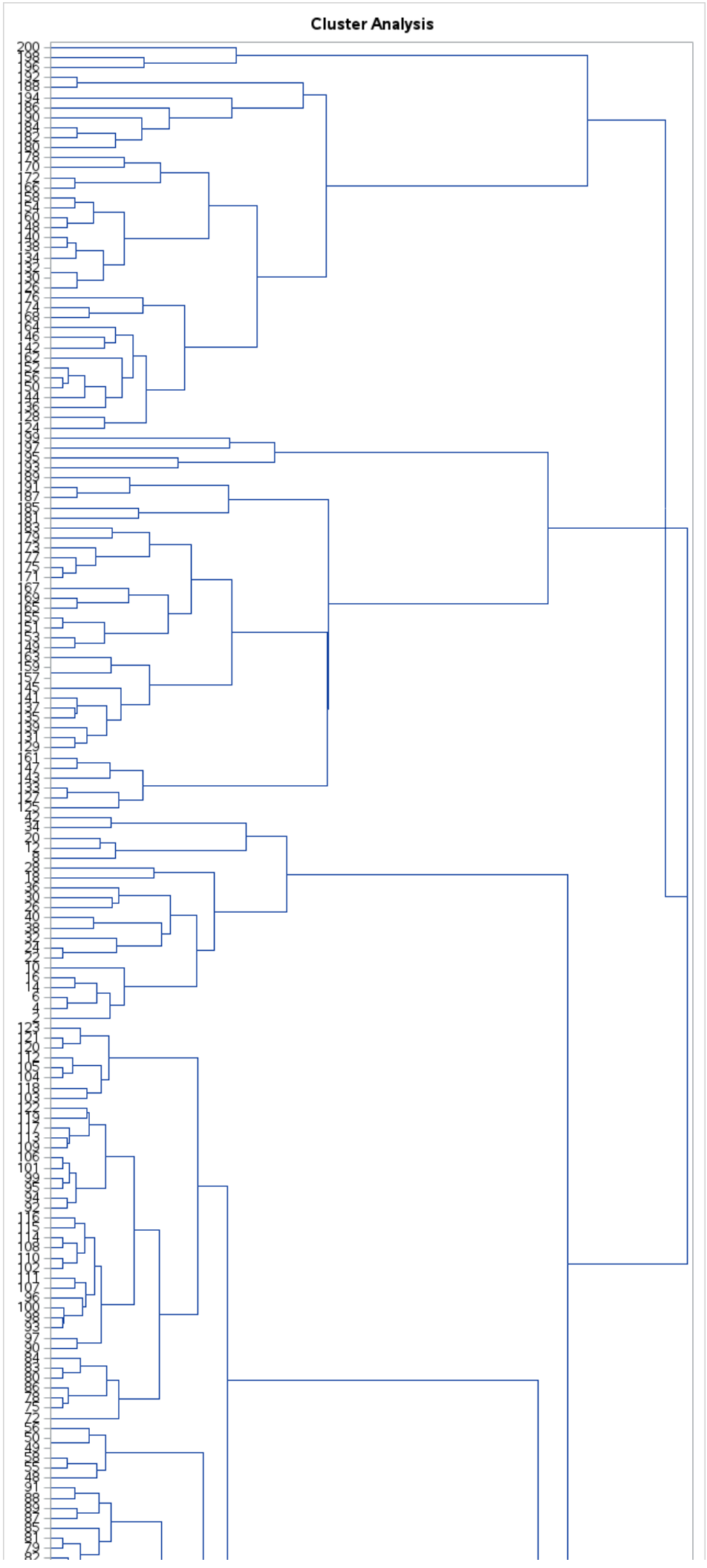
Root-Mean-Square Distance Between Observations	52.09011

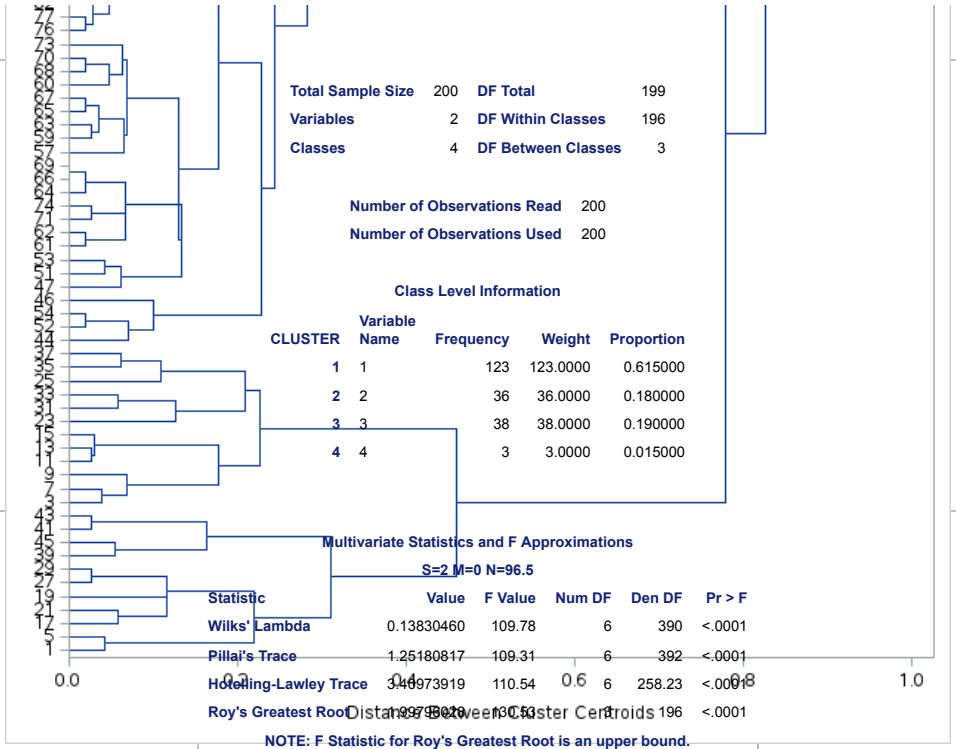
Cluster History								
Number of Clusters	Clusters Joined	Freq	Semipartial R-Square	R-Square	Approximate Expected R-Square	Cubic Clustering Criterion	Norm Centroid Distance	Tie

Cluster History

Number of Clusters	Clusters Joined		Freq	Semipartial R-Square	R-Square	Approximate Expected R-Square	Cubic Clustering Criterion	Norm Centroid Distance	Tie
15	CL73	CL80	5	0.0012	.937	.943	-1.5	0.3127	
14	CL32	CL24	28	0.0077	.929	.938	-2.1	0.3306	
13	CL34	CL20	4	0.0013	.928	.933	-1.0	0.3571	
12	CL23	CL15	21	0.0055	.922	.926	-.76	0.3778	
11	CL18	CL130	8	0.0025	.920	.919	0.28	0.4042	
10	CL14	CL11	36	0.0122	.908	.909	-.26	0.4408	
9	CL49	CL19	29	0.0094	.898	.898	0.05	0.4429	
8	CL9	CL21	34	0.0085	.890	.884	0.85	0.4446	
7	CL16	CL29	23	0.0122	.878	.866	1.54	0.46	
6	CL7	CL22	102	0.1088	.769	.842	-6.6	0.7796	
5	CL8	CL13	38	0.0227	.746	.808	-5.1	0.7942	
4	CL6	CL12	123	0.1197	.627	.758	-8.5	0.8271	
3	CL10	CL17	39	0.0205	.606	.673	-4.2	0.8584	
2	CL4	CL5	161	0.3021	.304	.389	-4.0	1.0175	
1	CL2	CL3	200	0.3040	.000	.000	0.00	0.9816	




Cluster Analysis



Total Sample Size	200	DF Total	199
Variables	2	DF Within Classes	196
Classes	4	DF Between Classes	3

Number of Observations Read	200
Number of Observations Used	200

Class Level Information

CLUSTER	Variable Name	Frequency	Weight	Proportion
1	1	123	123.0000	0.615000
2	2	36	36.0000	0.180000
3	3	38	38.0000	0.190000
4	4	3	3.0000	0.015000

Multivariate Statistics and F Approximations

S=2 M=0 N=96.5

Statistic	Value	F Value	Num DF	Den DF	Pr > F
Wilks' Lambda	0.13830460	109.78	6	390	<.0001
Pillai's Trace	1.25180817	109.31	6	392	<.0001
Hotelling-Lawley Trace	3.46973919	110.54	6	258.23	<.0001
Roy's Greatest Root	1.99798029	130.53	3	196	<.0001

NOTE: F Statistic for Roy's Greatest Root is an upper bound.

NOTE: F Statistic for Wilks' Lambda is exact.

	Canonical Correlation	Adjusted Canonical Correlation	Approximate Standard Error	Squared Canonical Correlation	Eigenvalues of Inv(E)*H = CanRsq/(1-CanRsq)				Test of H0: The canonical correlations in the current row and all that follow are zero				
					Eigenvalue	Difference	Proportion	Cumulative	Likelihood Ratio	Approximate F Value	Num DF	Den DF	Pr > F
1	0.816358	0.809017	0.023645	0.666440	1.9980	0.5862	0.5860	0.5860	0.13830460	109.78	6	390	<.0001
2	0.765094	.	0.029392	0.585368	1.4118		0.4140	1.0000	0.41463170	138.35	2	196	<.0001

Total Canonical Structure

Variable	Can1	Can2
Annual Income (k$)	0.999997	-0.002339
Spending Score (1-100)	0.012242	0.999925

Between Canonical Structure

Variable	Can1	Can2
Annual Income (k$)	0.999998	-0.002192
Spending Score (1-100)	0.013062	0.999915

Pooled Within Canonical Structure

Variable	Can1	Can2
Annual Income (k$)	0.999997	-0.002608
Spending Score (1-100)	0.010980	0.999940

Total-Sample Standardized Canonical Coefficients

Variable	Can1	Can2
Annual Income (k$)	1.718316604	-0.018868381
Spending Score (1-100)	0.004019500	1.541311263

Pooled Within-Class Standardized Canonical Coefficients

Variable	Can1	Can2
Annual Income (k$)	0.999974765	-0.010980459
Spending Score (1-100)	0.002607927	1.000031650

Raw Canonical Coefficients

Variable	Can1	Can2
Annual Income (k$)	0.0654229905	-.0007183926
Spending Score (1-100)	0.0001556526	0.0596863310

Class Means on Canonical Variables

CLUSTER	Can1	Can2
1	-1.073356438	-0.010342005
2	1.480375738	1.906694080

Class Means on Canonical Variables		
CLUSTER	Can1	Can2
3	1.724870161	-1.903197530
4	4.394749730	1.650861957