Selection Method	Simple Random Sampling

Input Data Set	CUST
Random Number Seed	581408758
Sample Size	10
Selection Probability	0.2
Sampling Weight	5
Output Data Set	SAMPLE_CUSTOMER

sample customer data

Obs	customer id	year of birth	tenure date	region of country	type of card	gender	source code	preferred payment type	income	education	Number in house	credit score
1	1	1963-07-10	2014-10-04	m	1	m	G	a	57737	19	2	342
2	7	1961-04-27	2013-05-09	L	1	m		b	114927	20	1	327
3	16	1964-07-01	.	M	1	M	H	C	116410	13	2	312
4	22	1969-05-04	2015-03-18	m	1	F	G	C	96156	11	4	572
5	26	1989-10-18	2017-09-15	P	1	m	H	a	140094	19	5	603
6	32	.	2017-05-06	L	1		G	C	23384	14	4	597
7	34	1965-02-27	2021-04-27	N	1		R	a	123379	15	5	678
8	36	.	2019-02-26		1	F	H	c	50723	14	4	513
9	40	1940-06-29	.	P	1	f	H	B	140573	20	5	647
10	48	1948-05-13	2021-09-30	M	1	f	H	a	125793	18	5	475

sample customer data

Obs	customer id	year of birth	tenure date	region of country	type of card	gender	source code	preferred payment type	income	education	Number in house	credit score
1	1	1963-07-10	2014-10-04	m	1	m	G	a	57737	19	2	342
2	2	1996-03-11	2013-04-06	l	1	f	H	A	104299	18	1	385
3	3	1977-12-16	2015-02-08	M	1	F		a	43672	15	1	383
4	4	1970-04-24	.		1	F	H	a	32802	11	1	373
5	5	1972-01-29	2018-07-07	K	1		H	A	147643	20	2	378
6	6	.	2010-09-16	k	1	m	H	A	106941	20	2	312
7	7	1961-04-27	2013-05-09	L	1	m		b	114927	20	1	327
8	8	.	2016-12-05	m	1	F	R	B	71008	19	2	395
9	9	1996-04-04	2015-10-14	L	1	f	R	c	95156	15	1	303
10	10	1993-01-06	2011-07-30	l	1	f	G	C	136115	14	2	395
11	11	1975-01-28	.	k	1	M	G	C	94944	11	2	362
12	12	1993-02-11	2014-03-13	m	1	M	G	a	113167	10	1	335
13	13	.	2017-01-14	m	1		G	A	102532	12	1	362
14	14	1990-01-25	2012-01-05	l	1			c	118792	11	1	326
15	15	1981-11-08	2014-07-05		1		H	C	38609	11	2	343
16	16	1964-07-01	.	M	1	M	H	C	116410	13	2	312
17	17	1961-07-09	2010-06-17	l	1	F	R	b	62561	15	1	357
18	18	.	2017-05-01	m	1	m	R	B	35265	11	1	377
19	19	1997-09-19	2014-04-06	k	1	f	G	c	104341	13	1	640
20	20	1988-09-03	2011-09-13	m	1	m	H	b	94561	14	2	747
21	21	1983-02-09	2013-06-13	L	1	f		B	44399	18	5	634
22	22	1969-05-04	2015-03-18	m	1	F	G	C	96156	11	4	572
23	23	1963-09-10	2021-02-10	P	1	F	G	a	80071	18	4	667
24	24	1963-07-26	.	M	1		H	A	52405	17	3	534
25	25	1976-03-12	2019-10-12	O	1	m	H	a	70565	13	4	579
26	26	1989-10-18	2017-09-15	P	1	m	H	a	140094	19	5	603
27	27	1978-11-13	2018-03-03	K	1	F	H	A	42315	13	4	649
28	28	1962-09-04	.	L	1	f	R	A	85839	18	4	706
29	29	1960-06-25	2021-06-12	M	1	f	R	b	38522	14	5	664
30	30	1984-01-25	2018-11-03		1	M	R	B	125104	19	4	506
31	31	1972-04-09	2021-10-01	M	1	M	R	c	29018	20	4	610
32	32	.	2017-05-06	L	1		G	C	23384	14	4	597
33	33	1986-10-01	2019-11-08	N	1		H	C	147898	20	5	648
34	34	1965-02-27	2021-04-27	N	1		R	a	123379	15	5	678
35	35	1985-10-27	2021-09-30	N	1	M	G	A	36209	19	4	570
36	36	.	2019-02-26		1	F	H	c	50723	14	4	513
37	37	1981-08-06	2021-12-02	P	1	m	G	C	35116	19	5	749
38	38	1951-10-07	2017-12-08	M	1	f	G	C	105472	15	3	670
39	39	1940-01-20	2018-07-12	N	1	m	H	b	122316	15	5	509
40	40	1940-06-29	.	P	1	f	H	B	140573	20	5	647
41	41	1943-11-23	2017-05-19		1	F	R	c	75365	13	4	562
42	42	1941-07-17	2018-10-14	N	1	F	R	b	95591	19	4	619
43	43	1955-02-12	2017-06-25	L	1		G	B	75528	14	4	546
44	44	1952-12-17	2017-09-08	L	1	m	H	C	31541	12	4	707
45	45	1943-08-03	2018-11-03	k	1	m	R	a	52716	15	3	562
46	46	1941-07-08	.	L	1	F	G	A	67725	15	4	651
47	47	1943-03-15	2020-08-01		1	f	H	a	88364	11	4	554

Obs	customer id	year of birth	tenure date	region of country	type of card	gender	source code	preferred payment type	income	education	Number in house	credit score
48	48	1948-05-13	2021-09-30	M	1	f	H	a	125793	18	5	475
49	49	1950-06-08	2020-11-21	k	1	M	H	A	37470	14	4	485
50	50	1951-02-11	.	l	1	M	R	A	58875	14	4	602

sample customer data

Selection Method	Simple Random Sampling

Input Data Set	TRANS
Random Number Seed	581584117
Sample Size	10
Selection Probability	0.00125
Sampling Weight	799.9
Output Data Set	SAMPLE_TRANSCTION

sample transction data

Obs	customer id	transaction date	transaction type	amount
1	6	2019-06-05	A	926
2	11	2016-09-20	B	783
3	11	2017-10-22	B	818
4	13	2017-10-29	C	569
5	21	2012-08-11	A	450
6	32	2017-09-13	B	518
7	32	2017-10-12	B	561
8	33	2017-03-13	A	548
9	35	2016-06-05	C	504
10	35	2013-12-16	B	360

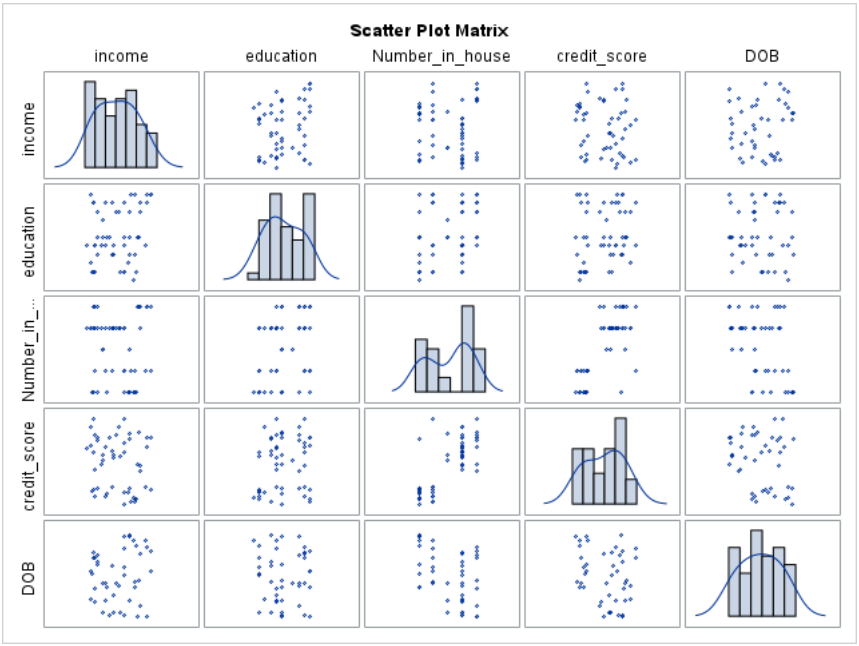
sample transction data

Data Set Name	WORK.CUST	Observations	50
Member Type	DATA	Variables	12
Engine	V9	Indexes	0
Created	10/15/2023 18:53:01	Observation Length	72
Last Modified	10/15/2023 18:53:01	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	1816
Obs in First Data Page	50
Number of Data Set Repairs	0
Filename	/saswork/SAS_work9CEB00014B07_odaws01-usw2-2.oda.sas.com/SAS_work21E300014B07_odaws01-usw2-2.oda.sas.com/cust.sas7bdat
Release Created	9.0401M7
Host Created	Linux
Inode Number	134326804
Access Permission	rw-r--r--
Owner Name	u63049952
File Size	256KB
File Size (bytes)	262144

Alphabetic List of Variables and Attributes					
#	Variable	Type	Len	Format	Informat
11	Number in house	Num	8	BEST12.	BEST32.
12	credit score	Num	8	BEST12.	BEST32.
1	customer id	Num	8	BEST12.	BEST32.
10	education	Num	8	BEST12.	BEST32.
6	gender	Char	1	$1.	$1.
9	income	Num	8	BEST12.	BEST32.
8	preferred payment type	Char	1	$1.	$1.
4	region of country	Char	1	$1.	$1.
7	source code	Char	1	$1.	$1.
3	tenure date	Num	8	YYMMDD10.	YYMMDD10.
5	type of card	Num	8	BEST12.	BEST32.

Alphabetic List of Variables and Attributes					
#	Variable	Type	Len	Format	Informat
2	year of birth	Num	8	YYMMDD10.	YYMMDD10.



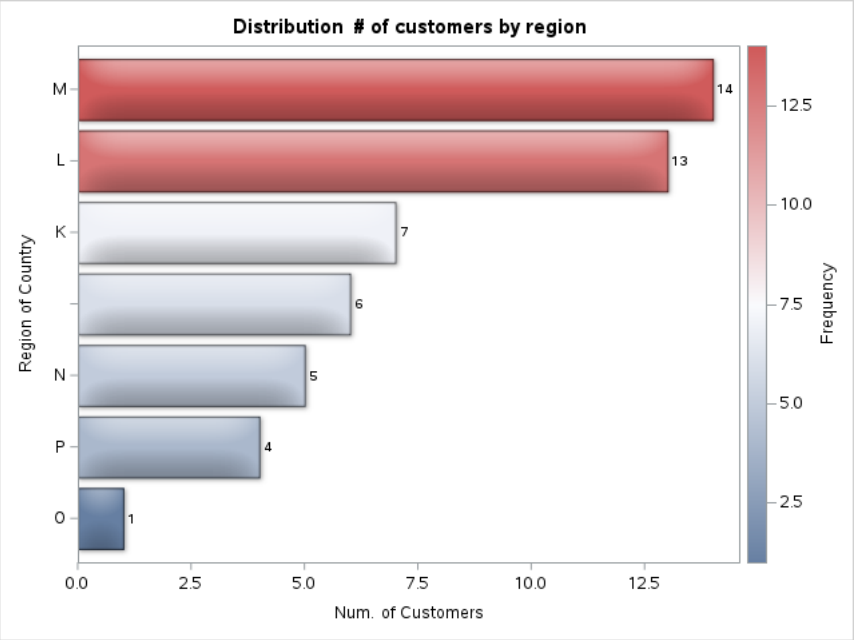
Scatter Plot Matrix

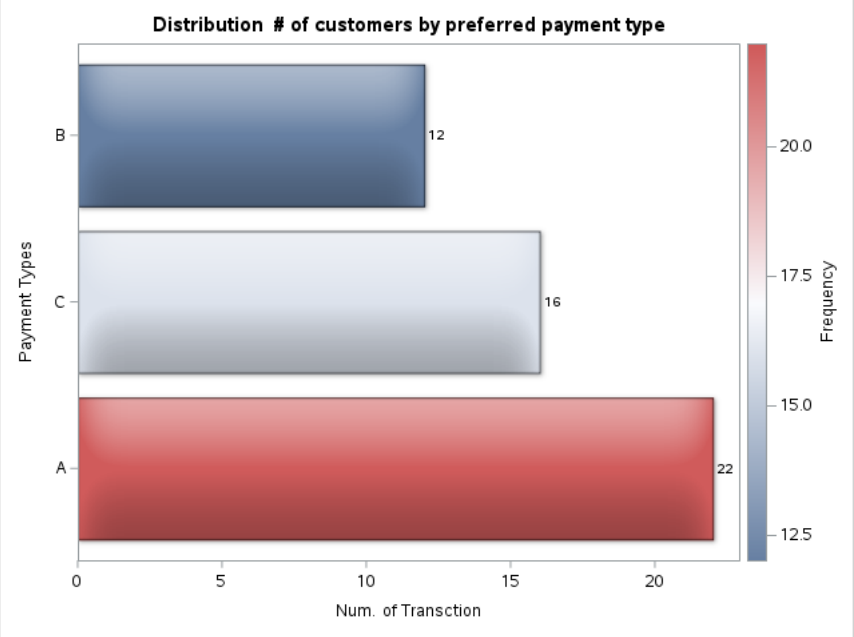
region_of_country1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
	6	12.00	6	12.00
K	7	14.00	13	26.00
L	13	26.00	26	52.00
M	14	28.00	40	80.00
N	5	10.00	45	90.00
O	1	2.00	46	92.00
P	4	8.00	50	100.00

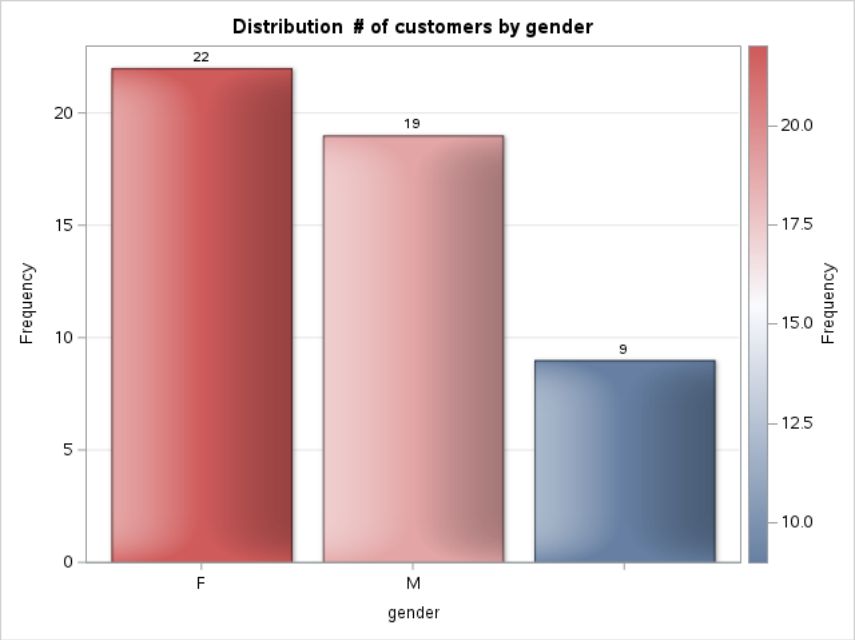
source_code1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
	4	8.00	4	8.00
G	14	28.00	18	36.00
H	19	38.00	37	74.00
R	13	26.00	50	100.00

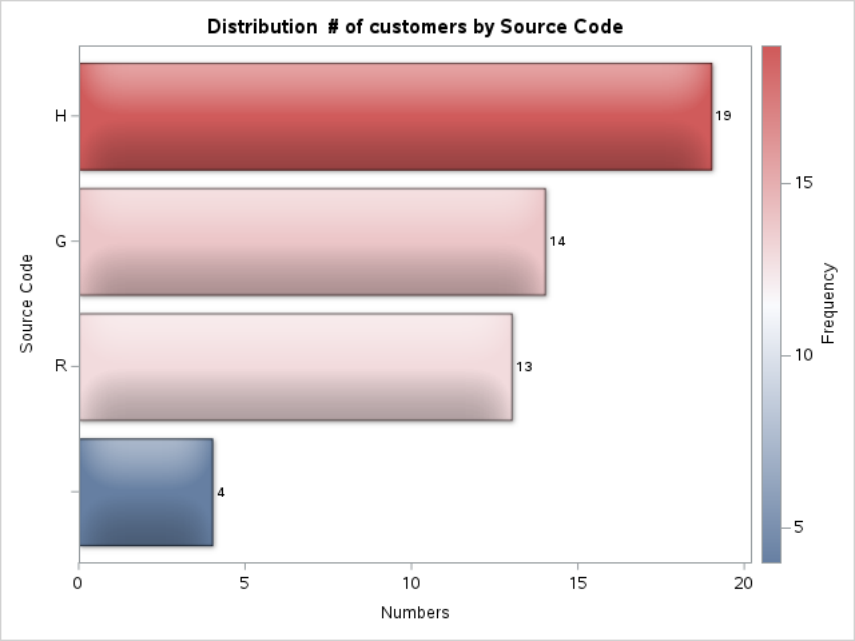
gender1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
	9	18.00	9	18.00
F	22	44.00	31	62.00
M	19	38.00	50	100.00

preferred_payment_type1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
A	22	44.00	22	44.00
B	12	24.00	34	68.00
C	16	32.00	50	100.00


Distribution # of customers by region
Region of Country
M
L
K
N
P
O
14
13
7
6
5
4
1
0.0
2.5
5.0
7.5
10.0
12.5
Num. of Customers
Frequency
12.5
10.0
7.5
5.0
2.5

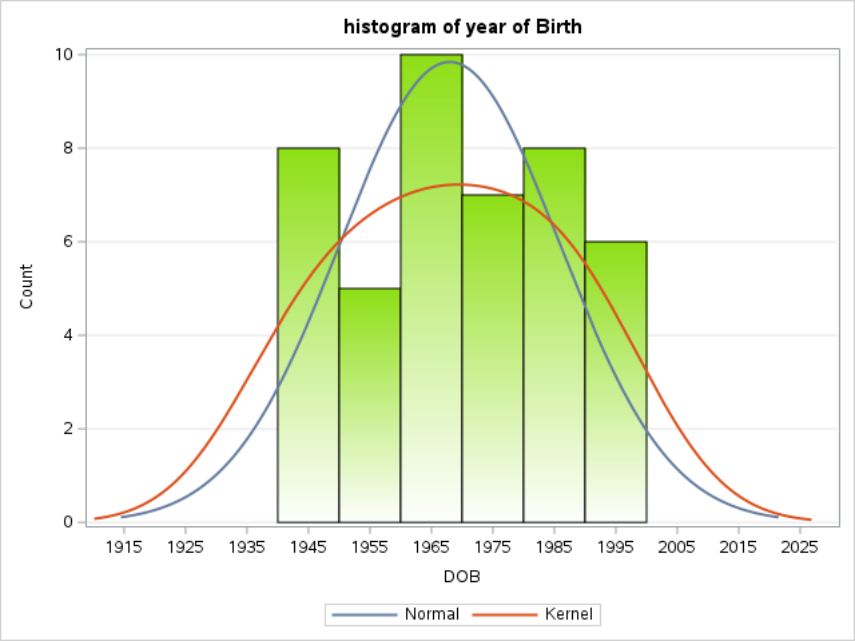

Distribution # of customers by preferred payment type
Payment Types
B
C
A
12
16
22
0
5
10
15
20
Num. of Transction
Frequency
20.0
17.5
15.0
12.5

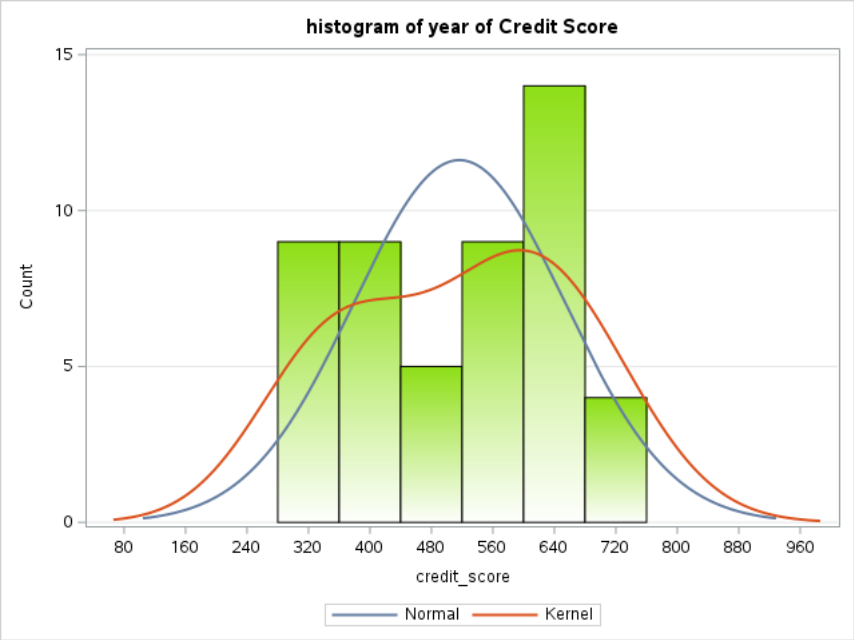

Distribution # of customers by gender
22
19
9
20
15
10
5
0
Frequency
F
M
gender
20.0
17.5
15.0
12.5
10.0
Frequency


Distribution # of customers by Source Code
H
G
R
19
14
13
4
Source Code
0
5
10
15
20
Numbers
15
10
5
Frequency

---

histogram of income
Count
10
8
6
4
2
0
-30000
10000
50000
90000
130000
170000
210000
income
Normal
Kernel

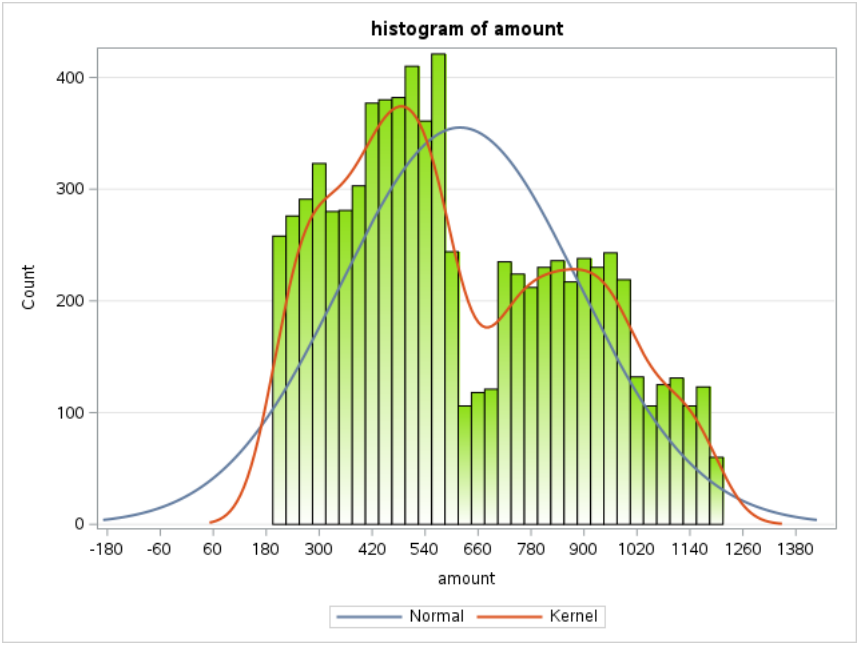

histogram of year of Birth
Count
10
8
6
4
2
0
1915
1925
1935
1945
1955
1965
1975
1985
1995
2005
2015
2025
DOB
Normal
Kernel

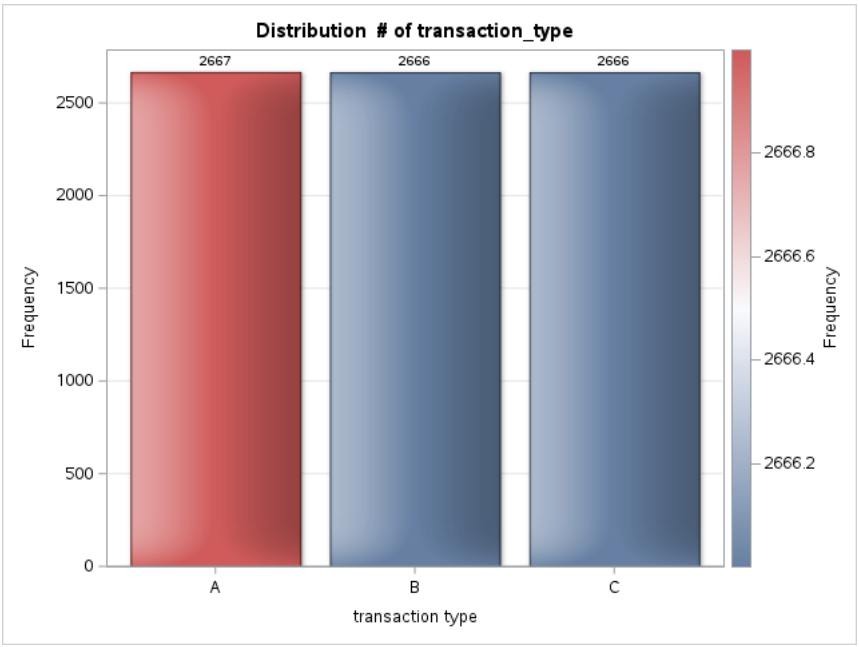


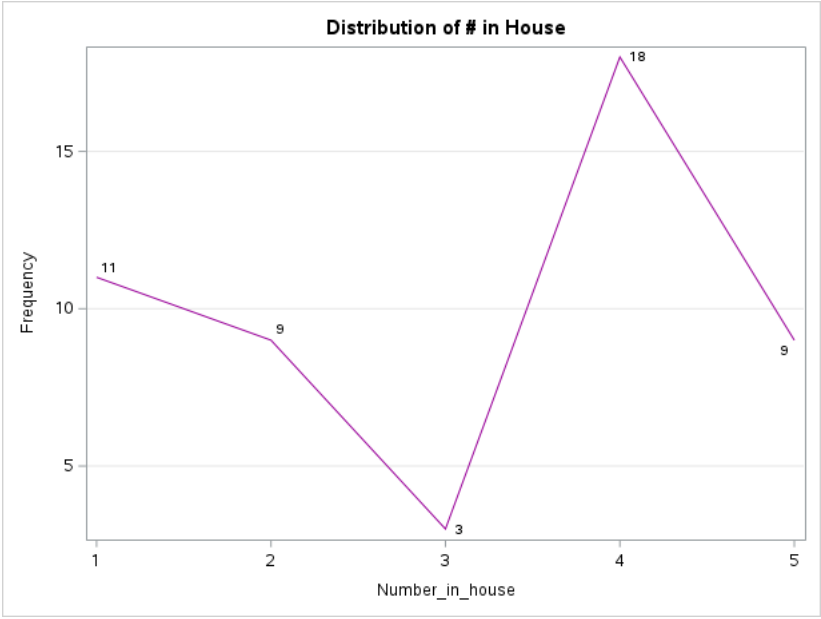
Data Set Name	WORK.TRANS	**Observations**	7999
Member Type	DATA	**Variables**	4
Engine	V9	**Indexes**	0
Created	10/15/2023 18:53:06	**Observation Length**	32
Last Modified	10/15/2023 18:53:06	**Deleted Observations**	0
Protection		**Compressed**	NO
Data Set Type		**Sorted**	NO
Label			
Data Representation	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	2
First Data Page	1
Max Obs per Page	4078
Obs in First Data Page	4006
Number of Data Set Repairs	0
Filename	/saswork/SAS_work9CEB00014B07_odaws01-usw2-2.oda.sas.com/SAS_work21E300014B07_odaws01-usw2-2.oda.sas.com/trans.sas7bdat
Release Created	9.0401M7
Host Created	Linux
Inode Number	134326805
Access Permission	rw-r--r--
Owner Name	u63049952
File Size	384KB
File Size (bytes)	393216

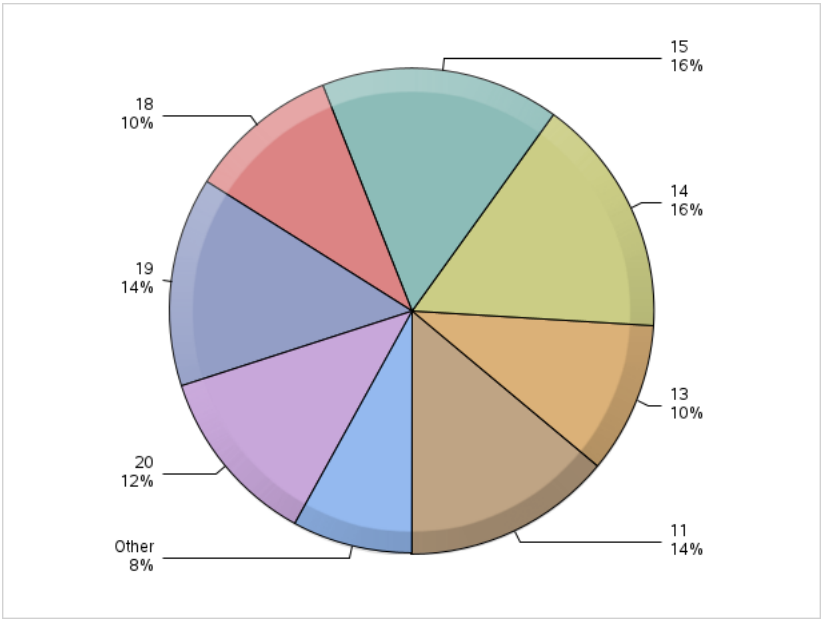
Alphabetic List of Variables and Attributes					
#	**Variable**	**Type**	**Len**	**Format**	**Informat**
4	amount	Num	8	BEST12.	BEST32.
1	customer_id	Num	8	BEST12.	BEST32.
2	transaction_date	Num	8	YYMMDD10.	YYMMDD10.
3	transaction_type	Char	1	$1.	$1.


histogram of amount
Count
400
300
200
100
0
-180
-60
60
180
300
420
540
660
780
900
1020
1140
1260
1380
amount
Normal
Kernel


Distribution # of transaction_type
2667
2666
2666
Frequency
2500
2000
1500
1000
500
0
A
B
C
transaction type
2666.8
2666.6
2666.4
2666.2
Frequency



Distribution of Education



Data Set Name	WORK.CUST1	**Observations**	50
Member Type	DATA	**Variables**	13
Engine	V9	**Indexes**	0
Created	10/15/2023 18:53:02	**Observation Length**	80
Last Modified	10/15/2023 18:53:02	**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	1635
Obs in First Data Page	50
Number of Data Set Repairs	0
Filename	/saswork/SAS_work9CEB00014B07_odaws01-usw2-2.oda.sas.com/SAS_work21E300014B07_odaws01-usw2-2.oda.sas.com/cust1.sas7bdat
Release Created	9.0401M7
Host Created	Linux
Inode Number	134326804

Engine/Host Dependent Information	
Access Permission	rw-r--r--
Owner Name	u63049952
File Size	256KB
File Size (bytes)	262144

Alphabetic List of Variables and Attributes					
#	Variable	Type	Len	Format	Informat
13	DOB	Num	8		
7	Number_in_house	Num	8	BEST12.	BEST32.
8	credit_score	Num	8	BEST12.	BEST32.
1	customer_id	Num	8	BEST12.	BEST32.
6	education	Num	8	BEST12.	BEST32.
12	gender1	Char	1		
5	income	Num	8	BEST12.	BEST32.
11	preferred_payment_type1	Char	1		
9	region_of_country1	Char	1		
10	source_code1	Char	1		
3	tenure_date	Num	8	YYMMDD10.	YYMMDD10.
4	type_of_card	Num	8	BEST12.	BEST32.
2	year_of_birth	Num	8	YYMMDD10.	YYMMDD10.

Before Replacing missing value

6 Variables:	income education Number_in_house credit_score year_of_birth tenure_date

Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
income	50	81800	36779	4090008	23384	147898
education	50	15.36000	3.15427	768.00000	10.00000	20.00000
Number_in_house	50	3.10000	1.47427	155.00000	1.00000	5.00000
credit_score	50	516.44000	137.35284	25822	303.00000	749.00000
year_of_birth	44	3076	6505	135354	-7286	13776
tenure_date	42	20873	1214	876648	18430	22616

Pearson Correlation Coefficients Prob > |r| under H0: Rho=0 Number of Observations						
	income	education	Number_in_house	credit_score	year_of_birth	tenure_date
income	1.00000 50	0.23065 0.1071 50	-0.04591 0.7516 50	-0.15893 0.2703 50	0.12518 0.4182 44	-0.20013 0.2038 42
education	0.23065 0.1071 50	1.00000 50	0.29492 0.0376 50	0.16845 0.2422 50	-0.02406 0.8768 44	0.17180 0.2766 42
Number_in_house	-0.04591 0.7516 50	0.29492 0.0376 50	1.00000 50	0.74628 <.0001 50	-0.42505 0.0040 44	0.70419 <.0001 42
credit_score	-0.15893 0.2703 50	0.16845 0.2422 50	0.74628 <.0001 50	1.00000 50	-0.23450 0.1255 44	0.51786 0.0004 42
year_of_birth	0.12518 0.4182 44	-0.02406 0.8768 44	-0.42505 0.0040 44	-0.23450 0.1255 44	1.00000 44	-0.40720 0.0137 36
tenure_date	-0.20013 0.2038 42	0.17180 0.2766 42	0.70419 <.0001 42	0.51786 0.0004 42	-0.40720 0.0137 36	1.00000 42

After Replacing Missing Values with Means

6 Variables:	income education Number_in_house credit_score year_of_birth tenure_date

Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
income	50	81800	36779	4090008	23384	147898
education	50	15.36000	3.15427	768.00000	10.00000	20.00000
Number_in_house	50	3.10000	1.47427	155.00000	1.00000	5.00000
credit_score	50	516.44000	137.35284	25822	303.00000	749.00000
year_of_birth	50	3076	6094	153811	-7286	13776
tenure_date	50	20873	1110	1043629	18430	22616

Pearson Correlation Coefficients, N = 50 Prob > |r| under H0: Rho=0						
	income	education	Number_in_house	credit_score	year_of_birth	tenure_date
income	1.00000	0.23065 0.1071	-0.04591 0.7516	-0.15893 0.2703	0.11743 0.4167	-0.18632 0.1951
education	0.23065 0.1071	1.00000	0.29492 0.0376	0.16845 0.2422	-0.02229 0.8779	0.15762 0.2743
Number_in_house	-0.04591 0.7516	0.29492 0.0376	1.00000	0.74628 <.0001	-0.39754 0.0043	0.66023 <.0001

Pearson Correlation Coefficients, N = 50 Prob > |r| under H0: Rho=0						
	income	education	Number_in_house	credit_score	year_of_birth	tenure_date
credit_score	-0.15893 0.2703	0.16845 0.2422	0.74628 <.0001	1.00000	-0.21970 0.1253	0.46937 0.0006
year_of_birth	0.11743 0.4167	-0.02229 0.8779	-0.39754 0.0043	-0.21970 0.1253	1.00000	-0.35123 0.0124
tenure_date	-0.18632 0.1951	0.15762 0.2743	0.66023 <.0001	0.46937 0.0006	-0.35123 0.0124	1.00000

Data Set Name	WORK.TRANS	Observations	7999
Member Type	DATA	Variables	4
Engine	V9	Indexes	0
Created	10/15/2023 18:53:06	Observation Length	32
Last Modified	10/15/2023 18:53:06	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	2
First Data Page	1
Max Obs per Page	4078
Obs in First Data Page	4006
Number of Data Set Repairs	0
Filename	/saswork/SAS_work9CEB00014B07_odaws01-usw2-2.oda.sas.com/SAS_work21E300014B07_odaws01-usw2-2.oda.sas.com/trans.sas7bdat
Release Created	9.0401M7
Host Created	Linux
Inode Number	134326805
Access Permission	rw-r--r--
Owner Name	u63049952
File Size	384KB
File Size (bytes)	393216

Alphabetic List of Variables and Attributes					
#	Variable	Type	Len	Format	Informat
4	amount	Num	8	BEST12.	BEST32.
1	customer_id	Num	8	BEST12.	BEST32.
2	transaction_date	Num	8	YYMMDD10.	YYMMDD10.
3	transaction_type	Char	1	$1.	$1.

Transction Statistics

Obs	Attributes	Min	Max	Mean	Median	Std_Deviation
1	Amount	200	1200	619.02	561	269.53
2	Transction Date	2012-01-31	2019-07-20	2016-06-11	2016-12-26	1961-12-02

Transction Statistics

Obs	min_YOB	min_tenure	max_YOB	max_tenure	mean_YOB	mean_tenure	med_YOB	med_tenure	std_YOB	std_tenure
1	1940-01-20	2010-06-17	1997-09-19	2021-12-02	1968-06-03	2017-02-22	1967-04-01	2017-08-01	1977-10-23	1963-04-28

Customer Statistics

Obs	Attributes	Min	Max	Mean	Median	Std_Deviation
1	Income	23384	147898	81800.16	82955	36778.55
2	Education	10	20	15.36	15	3.15
3	Num_in_House	1	5	3.1	4	91.47
4	Credit_Score	303	749	516.44	550	137.35
5	Year_Of_Birth	1940-01-20	1997-09-19	1968-06-03	1967-04-01	1977-10-23
6	Tenure_Date	2010-06-17	2021-12-02	2017-02-22	2017-08-01	1963-04-28

Selection Method	Simple Random Sampling

Input Data Set	ANALYTICAL_FILE
Random Number Seed	588888952
Sample Size	5
Selection Probability	0.000625

Sampling Weight	1599.8
Output Data Set	SAMPLE_ANALYTICAL_FILE

Cust-Trans Combined File

Obs	customer_id	year_of_birth	tenure_date	type_of_card	income	education	Number_in_house	credit_score	region_of_country1	source_code1	preferred_payment_type1	gender1	DOB	transaction_da
1	3	1977-12-16	2015-02-08	1	43672	15	1	383	M		A	F	1977	2019-03-
2	4	1970-04-24	.	1	32802	11	1	373		H	A	F	1970	2018-01-
3	8	.	2016-12-05	1	71008	19	2	395	M	R	B	F	.	2017-09-
4	19	1997-09-19	2014-04-06	1	104341	13	1	640	K	G	C	F	1997	2017-08-
5	40	1940-06-29	.	1	140573	20	5	647	P	H	B	F	1940	2016-06-

List of Derived Variables

Obs	age	tenure	total_expenditure	total_transaction	expenditure_per_year	expenditure_per_trans	transaction_per_year	PTC
1	60	9	$187,383.00	197	$20,820.33	$951.18	22	0.36
2	27	10	$187,476.00	199	$18,747.60	$942.09	20	0.18
3	46	8	$187,643.00	200	$23,455.38	$938.22	25	0.54
4	53	.	$223,732.00	236	.	$948.02	.	.
5	51	5	$193,016.00	205	$38,603.20	$941.54	41	0.26
6	.	13	$180,205.00	187	$13,861.92	$963.66	15	0.13
7	62	10	$212,780.00	224	$21,278.00	$949.91	23	0.19
8	.	7	$170,976.00	178	$24,425.14	$960.54	26	0.34
9	27	8	$175,441.00	185	$21,930.13	$948.33	24	0.23
10	30	12	$221,232.00	232	$18,436.00	$953.59	20	0.14

PTC = Propensity to consume = expenditure / income

Basic Statistics in Derived Variables Wih Missing Value

Variable	N	N Miss	Mean	50th Pctl	Std Dev	Minimum	Maximum
age	34	6	48.76	47.50	15.16	26.00	83.00
tenure	34	6	6.82	6.00	3.40	2.00	13.00
total_expenditure	40	0	123788.35	107754.00	50509.38	71672.00	223732.00
total_transaction	40	0	199.98	198.00	15.15	172.00	236.00
expenditure_per_year	34	6	21399.35	18591.80	10100.96	7774.50	42735.00
expenditure_per_trans	40	0	614.64	554.23	233.93	376.88	963.66
transaction_per_year	34	6	41.15	32.50	28.46	15.00	109.00
PTC	34	6	0.36	0.23	0.33	0.09	1.28

PTC = Propensity to consume = expenditure / income

Basic Statistics in Derived Variables

Variable	Mean	Median	Std Dev	Minimum	Maximum
age	48.76	47.50	15.16	26.00	83.00
tenure	6.82	6.00	3.40	2.00	13.00
total_expenditure	123788.35	107754.00	50509.38	71672.00	223732.00
total_transaction	199.98	198.00	15.15	172.00	236.00
expenditure_per_year	20978.22	18591.80	9346.83	7774.50	42735.00
expenditure_per_trans	614.64	554.23	233.93	376.88	963.66
transaction_per_year	39.85	32.50	26.37	15.00	109.00
PTC	0.34	0.23	0.31	0.09	1.28

PTC = Propensity to consume = expenditure / income

Summary of Total Expenditure

Obs	min_exp	max_exp	average_exp	num_peoples	total_exp	Groups
1	$71,672.00	$77,745.00	$74,996.80	10	$749,968.00	group_1
2	$78,949.00	$86,955.00	$81,572.60	10	$815,726.00	group_2
3	$128,553.00	$164,776.00	$144,595.60	10	$1,445,956.00	group_3
4	$170,976.00	$223,732.00	$193,988.40	10	$1,939,884.00	group_4

PTC = Propensity to consume = expenditure / income

Summary of age, tenure by regions

Obs	Region_Name	age_min	tenure_min	age_max	tenure_max	age_mean	tenure_mean	age_med	tenure_med	age_std	tenure_std
1		26	2	83	13	49.1613	6.9032	48.0	6	15.7228	3.48669
2	K	26	5	51	13	42.5000	8.0000	46.5	7	11.2694	3.82971
3	L	27	6	62	13	42.7500	10.0000	36.5	10	16.1930	2.20389
4	M	30	2	72	12	53.0000	6.8182	56.5	7	12.9185	2.96034

Obs	Region_Name	age_min	tenure_min	age_max	tenure_max	age_mean	tenure_mean	age_med	tenure_med	age_std	tenure_std
5	N	37	2	83	5	54.0000	3.2500	48.0	3	21.6179	1.50000
6	O	47	4	47	4	47.0000	4.0000	47.0	4	.	.
7	P	34	2	83	6	54.7500	3.3333	51.0	2	21.7466	2.30940

PTC = Propensity to consume = expenditure / income

Summary of Total expenditure and Total Transaction by regions

Obs	Region_Name	totalExp_min	totalTrans_min	totalExp_max	totalTrans_max	totalExp_mean	totalTrans_mean	totalExp_med	totalTrans_med	totalExp_std	totalTrans_std
1		$71,672.00	172	$221,232.00	232	$123,241.75	199.972	$107,754.00	198.5	$49,334.59	14.3337
2	K	$79,019.00	187	$193,016.00	212	$149,290.60	200.400	$148,515.00	205.0	$44,213.17	10.1390
3	L	$73,878.00	185	$221,232.00	232	$145,679.67	204.556	$147,653.00	199.0	$57,478.30	17.6218
4	M	$71,672.00	172	$187,643.00	228	$129,379.77	199.615	$140,396.00	200.0	$44,342.82	17.0858
5	N	$73,255.00	182	$79,342.00	198	$76,289.75	191.250	$76,281.00	192.5	$2,745.31	8.0571
6	O	$73,115.00	194	$73,115.00	194	$73,115.00	194.000	$73,115.00	194.0	.	.
7	P	$78,949.00	196	$80,611.00	207	$79,730.50	200.500	$79,681.00	199.5	$832.21	4.6547

PTC = Propensity to consume = expenditure / income

Summary of Expenditure Per Year and Expenditure Per Transaction by regions

Obs	Region_Name	Exp_PY_min	Exp_PT_min	Exp_PY_max	Exp_PT_max	Exp_PY_mean	Exp_PT_mean	Exp_PY_med	Exp_PT_med	Exp_PY_std	Exp_PT_std
1		$7,774.50	$376.88	$42,735.00	$963.66	$21,402.50	$613.35	$18,591.80	$554.23	$9,754.53	$234.45
2	K	$13,861.92	$409.42	$38,603.20	$963.66	$20,609.88	$745.27	$16,188.67	$724.46	$10,198.19	$225.17
3	L	$7,774.50	$384.78	$21,930.13	$953.59	$15,790.62	$707.45	$18,436.00	$699.78	$5,052.68	$256.80
4	M	$8,959.00	$393.87	$42,735.00	$960.54	$21,934.99	$647.93	$20,820.33	$697.71	$9,431.14	$220.85
5	N	$14,970.40	$392.47	$38,855.00	$402.50	$27,572.10	$398.99	$28,231.50	$400.50	$11,943.78	$4.45
6	O	$18,278.75	$376.88	$18,278.75	$376.88	$18,278.75	$376.88	$18,278.75	$376.88	.	.
7	P	$13,158.17	$387.76	$40,305.50	$403.06	$27,900.74	$397.77	$29,069.65	$400.13	$14,065.62	$7.15

Exp_PY = Expenditure Per Year
Exp_PT = Expenditure Per Transaction

Summary of Transaction Per Year and Propensity To Consume by regions

Obs	Region_Name	Trans_PY_min	PTC_min	Trans_PY_max	PTC_max	Trans_PY_mean	PTC_mean	Trans_PY_med	PTC_med	Trans_PY_std	PTC_std
1		15.0	0.09	109.0	1.28	40.4028	0.35	32.5	0.23	27.5782	0.32
2	K	15.0	0.13	41.0	0.37	30.3000	0.23	32.5	0.23	10.8259	0.10
3	L	17.0	0.10	32.5	0.53	22.8333	0.22	20.0	0.18	5.8202	0.12
4	M	18.0	0.09	109.0	1.28	38.8462	0.43	32.5	0.23	27.6484	0.39
5	N	38.0	0.12	99.0	1.07	69.5000	0.41	70.5	0.22	30.0278	0.45
6	O	49.0	0.26	49.0	0.26	49.0000	0.26	49.0	0.26	.	.
7	P	32.5	0.09	100.0	1.15	66.3750	0.49	66.5	0.36	38.8273	0.47

Trans_PY = Transaction Per Year
PTC = Propensity To Consume