

SAS Log

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128 LIBNAME in v604 "c:\DATA\MYSAS";
NOTE: Libref IN was successfully assigned as follows:
      Engine:          V604
      Physical Name:  c:\DATA\MYSAS
129
130 DATA TEMP; SET in.TC80;
131
132 /*CREATING THREE CATEGORY INDUSTRY VARIABLE*/
133 TINDUS=.;
134 IF INDUSTRY=171 THEN TINDUS=1;
135 ELSE IF INDUSTRY=172 THEN TINDUS=2;
136 ELSE TINDUS=3;
137
138 /*RECODING NEGATIVE INCOME VALUES TO 0*/
139
140 ARRAY MONEY {11} INCOME1-INCOME8 EARNINGS HHINCOME FAMINCOM;
141 DO I=1 TO 11;
142
143     IF MONEY {I} < 0 THEN MONEY {I} = 0;
144     END;
145
146 /*RECODING SEX SO THAT 1=MALE*/
147 DSEX=.;
148 IF SEX=0 THEN DSEX=1;
149 ELSE DSEX=0;
150
151 /*RECODING MARITAL STATUS TO 3 CATS*/
152 MARITAL3=.;
153 IF MARITAL=0 THEN MARITAL3=1;
154 ELSE IF MARITAL=1 | MARITAL=2 | MARITAL=3 THEN MARITAL3=2;
155 ELSE IF MARITAL=4 THEN MARITAL3=3;
156
157 /*RECODING EDUCATION TO 3 CATS*/
158 EDUC3=.;
159 IF REDUC=0 | REDUC=1 | REDUC=2 THEN EDUC3=1;
160 ELSE IF REDUC=3 THEN EDUC3=2;
161 ELSE IF REDUC=4 | REDUC=5 | REDUC=6 THEN EDUC3=3;
162
163 /*RECODING DIVISION TO 4 CATS*/
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163 REGION4=.;
164 IF DIVISION=1 | DIVISION=2 THEN REGION4=1;
165 ELSE IF DIVISION=3 | DIVISION=4 THEN REGION4=2;
166 ELSE IF DIVISION=5 | DIVISION=6 | DIVISION=7 THEN REGION4=3;
167 ELSE IF DIVISION=8 | DIVISION=9 THEN REGION4=4;
168
169 /*RECODING CLASS TO 4 CATS*/
170 CLASS4=.;
171 IF CLASS=1 THEN CLASS4=1;
172 ELSE IF CLASS=2 | CLASS=3 | CLASS=4 THEN CLASS4=2;
173 ELSE IF CLASS=5 | CLASS=6 THEN CLASS4=3;
174 ELSE IF CLASS=7 THEN CLASS4=4;
175
176 /*CREATING DUMMY VARS*/
177 IF MARITAL3=1 THEN M1=1;
178     ELSE M1=0;
179 IF MARITAL3=2 THEN M2=1;
180     ELSE M2=0;
181 IF MARITAL3=3 THEN M3=1;
182     ELSE M3=0;
183
184 IF TINDUS=1 THEN T1=1;
185     ELSE T1=0;
186 IF TINDUS=2 THEN T2=1;
187     ELSE T2=0;
188 IF TINDUS=3 THEN T3=1;
189     ELSE T3=0;
190
191 IF EDUC3=1 THEN E1=1;
192     ELSE E1=0;
193 IF EDUC3=2 THEN E2=1;
194     ELSE E2=0;
195 IF EDUC3=3 THEN E3=1;
196     ELSE E3=0;
197
198 IF REGION4=1 THEN R1=1;
199     ELSE R1=0;
200 IF REGION4=2 THEN R2=1;
201     ELSE R2=0;
202 IF REGION4=3 THEN R3=1;
203     ELSE R3=0;
204 IF REGION4=4 THEN R4=1;
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205     ELSE R4=0;
206
207 IF CLASS4=1 THEN C1=1;
208     ELSE C1=0;
209 IF CLASS4=2 THEN C2=1;
210     ELSE C2=0;
211 IF CLASS4=3 THEN C3=1;
212     ELSE C3=0;
213 IF CLASS4=4 THEN C4=1;
214     ELSE C4=0;
215
216     /*CREATING INTERACTION TERMS BETWEEN SEX AND INDEPENDENT VARS*/
217
218 DSEXAGE = DSEX * AGE;
219 DSEXM2 = DSEX * M2;
220 DSEXM3 = DSEX * M3;
221 DSEXR2 = DSEX * R2;
222 DSEXR3 = DSEX * R3;
223 DSEXR4 = DSEX * R4;
224 DSEXE1 = DSEX * E1;
225 DSEXE3 = DSEX * E3;
226 DSEXHRS = DSEX * HRSYR;
227 DSEXC2 = DSEX * C2;
228 DSEXC3 = DSEX * C3;
229 DSEXC4 = DSEX * C4;
230 DSEXT2 = DSEX * T2;
231 DSEXT3 = DSEX * T3;
232 RUN;
NOTE: There were 3544 observations read from the data set IN.TC80.
NOTE: The data set WORK.TEMP has 3544 observations and 105 variables.
NOTE: DATA statement used:
      real time           0.12 seconds
      cpu time            0.07 seconds
233
234     /*REGRESSION STANDARDIZATION EXAMPLE*/
235
236 DATA TEMPNM; SET TEMP;
237 IF MARITAL3 NE . AND TINDUS NE . AND EDUC3 NE . AND REGION4 NE .
238 AND CLASS4 NE . THEN OUTPUT TEMPNM;
239     /*THIS DELETES THOSE WITH MISSING VALUES ON ANY DUMMY VAR,
240     CREATING A TEMPORARY DATASET NAMED TEMPNM*/
241

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242 RUN;

NOTE: There were 3544 observations read from the data set WORK.TEMP.

NOTE: The data set WORK.TEMPNM has 3544 observations and 105 variables.

NOTE: DATA statement used:

real time	0.04 seconds
cpu time	0.03 seconds

243

244 PROC SORT DATA=TEMPNM; BY DSEX;

245

NOTE: There were 3544 observations read from the data set WORK.TEMPNM.

NOTE: The data set WORK.TEMPNM has 3544 observations and 105 variables.

NOTE: PROCEDURE SORT used:

real time	0.10 seconds
cpu time	0.04 seconds

246 PROC CORR DATA=TEMPNM NOMISS NOCORR;

247 VAR AGE M1-M3 R1-R4 E1-E3 HRSYR C1-C4 T1-T3 EARNINGS;

248 BY DSEX;

249

NOTE: PROCEDURE CORR used:

real time	0.29 seconds
cpu time	0.03 seconds

250 PROC REG DATA=TEMPNM SIMPLE;

251 /*REF=CURR MARR, NORTHEAST, H.S. EDUC, PR W&S WORK, NEWSPAPER*/

252 MODEL EARNINGS=AGE M2 M3 R2-R4 E1 E3 HRSYR C2-C4 T2 T3/STB;

253 BY DSEX;

254 RUN;

NOTE: 1935 observations read.

NOTE: 1935 observations used in computations.

NOTE: The above message was for the following by-group:

DSEX=0

NOTE: 1609 observations read.

NOTE: 1609 observations used in computations.

NOTE: The above message was for the following by-group:

DSEX=1

NOTE: Interactivity disabled with BY processing.

NOTE: PROCEDURE REG used:

real time	0.34 seconds
cpu time	0.04 seconds

SAS Listing

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-----DSEX=0-----

The CORR Procedure

20 Variables: AGE M1 M2 M3 R1 R2 R3 R4 E1 E2 E3 HRSYR C1 C2 C3 C4 T1
 T2 T3
 EARNINGS

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
AGE	1935	32.61085	11.84522	63102	16.00000	86.00000
M1	1935	0.55142	0.49748	1067	0	1.00000
M2	1935	0.16744	0.37347	324.00000	0	1.00000
M3	1935	0.28114	0.44967	544.00000	0	1.00000
R1	1935	0.22481	0.41756	435.00000	0	1.00000
R2	1935	0.30181	0.45916	584.00000	0	1.00000
R3	1935	0.27804	0.44815	538.00000	0	1.00000
R4	1935	0.19535	0.39657	378.00000	0	1.00000
E1	1935	0.08579	0.28012	166.00000	0	1.00000
E2	1935	0.58036	0.49363	1123	0	1.00000
E3	1935	0.33385	0.47171	646.00000	0	1.00000
HRSYR	1935	1651	636.28746	3193894	13.00000	5148
C1	1935	0.91576	0.27782	1772	0	1.00000
C2	1935	0.03928	0.19430	76.00000	0	1.00000
C3	1935	0.03876	0.19307	75.00000	0	1.00000
C4	1935	0.00620	0.07853	12.00000	0	1.00000
T1	1935	0.33747	0.47297	653.00000	0	1.00000
T2	1935	0.48320	0.49985	935.00000	0	1.00000
T3	1935	0.17933	0.38373	347.00000	0	1.00000
EARNINGS	1935	8014	5083	15507300	0	52465

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-----DSEX=1-----

The CORR Procedure

20 Variables: AGE M1 M2 M3 R1 R2 R3 R4 E1 E2 E3 HRSYR C1 C2 C3 C4 T1
 T2 T3
 EARNINGS

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
AGE	1609	42.21193	14.00646	67919	16.00000	84.00000
M1	1609	0.70354	0.45684	1132	0	1.00000
M2	1609	0.09260	0.28997	149.00000	0	1.00000
M3	1609	0.20385	0.40299	328.00000	0	1.00000
R1	1609	0.35177	0.47767	566.00000	0	1.00000
R2	1609	0.28465	0.45139	458.00000	0	1.00000
R3	1609	0.19142	0.39354	308.00000	0	1.00000
R4	1609	0.17216	0.37763	277.00000	0	1.00000
E1	1609	0.16346	0.36990	263.00000	0	1.00000
E2	1609	0.55687	0.49691	896.00000	0	1.00000
E3	1609	0.27968	0.44898	450.00000	0	1.00000
HRSYR	1609	1881	566.83994	3026907	4.00000	5148
C1	1609	0.90802	0.28909	1461	0	1.00000
C2	1609	0.03480	0.18334	56.00000	0	1.00000
C3	1609	0.05469	0.22745	88.00000	0	1.00000
C4	1609	0.00249	0.04981	4.00000	0	1.00000
T1	1609	0.26538	0.44167	427.00000	0	1.00000
T2	1609	0.63207	0.48239	1017	0	1.00000
T3	1609	0.10255	0.30346	165.00000	0	1.00000
EARNINGS	1609	15789	8184	25404900	0	70005

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-----DSEX=0-----

The REG Procedure

Descriptive Statistics

Variable	Sum	Mean	Uncorrected SS	Variance	Standard Deviation
Intercept	1935.00000	1.00000	1935.00000	0	0
AGE	63102	32.61085	2329168	140.30919	11.84522
M2	324.00000	0.16744	324.00000	0.13948	0.37347
M3	544.00000	0.28114	544.00000	0.20220	0.44967
R2	584.00000	0.30181	584.00000	0.21083	0.45916
R3	538.00000	0.27804	538.00000	0.20084	0.44815
R4	378.00000	0.19535	378.00000	0.15727	0.39657
E1	166.00000	0.08579	166.00000	0.07847	0.28012
E3	646.00000	0.33385	646.00000	0.22251	0.47171
HRSYR	3193894	1650.59121	6054815956	404862	636.28746
C2	76.00000	0.03928	76.00000	0.03775	0.19430
C3	75.00000	0.03876	75.00000	0.03728	0.19307
C4	12.00000	0.00620	12.00000	0.00617	0.07853
T2	935.00000	0.48320	935.00000	0.24985	0.49985
T3	347.00000	0.17933	347.00000	0.14725	0.38373
EARNINGS	15507300	8014.10853	1.74252E11	25840107	5083.31651

----- DSEX=0 -----

The REG Procedure
 Model: MODEL1
 Dependent Variable: EARNINGS

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	14	22711040177	1622217156	114.24	<.0001
Error	1920	27263726310	14199857		
Corrected Total	1934	49974766487			

Root MSE	3768.26982	R-Square	0.4545
Dependent Mean	8014.10853	Adj R-Sq	0.4505
Coeff Var	47.02045		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t	Standardized Estimate
Intercept	1	-2510.74625	424.51982	-5.91	<.0001	0
AGE	1	61.05053	8.24469	7.40	<.0001	0.14226
M2	1	345.49923	242.84220	1.42	0.1550	0.02538
M3	1	-108.29407	222.39186	-0.49	0.6263	-0.00958
R2	1	-215.10511	240.04972	-0.90	0.3703	-0.01943
R3	1	-726.23333	248.51118	-2.92	0.0035	-0.06403
R4	1	405.84588	268.84033	1.51	0.1313	0.03166
E1	1	-218.75497	319.26827	-0.69	0.4933	-0.01205
E3	1	34.64746	191.21853	0.18	0.8562	0.00322
HRSYR	1	4.84827	0.13988	34.66	<.0001	0.60687
C2	1	1316.08319	465.04982	2.83	0.0047	0.05031
C3	1	-4.07043	454.91056	-0.01	0.9929	-0.00015460
C4	1	-10719	1104.22923	-9.71	<.0001	-0.16558
T2	1	1131.21669	197.04338	5.74	<.0001	0.11123
T3	1	931.86834	262.10674	3.56	0.0004	0.07034

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----- DSEX=1 -----

The REG Procedure
 Model: MODEL1
 Dependent Variable: EARNINGS

Descriptive Statistics

Variable	Sum	Mean	Uncorrected SS	Variance	Standard Deviation
Intercept	1609.00000	1.00000	1609.00000	0	0
AGE	67919	42.21193	3182451	196.18080	14.00646
M2	149.00000	0.09260	149.00000	0.08408	0.28997
M3	328.00000	0.20385	328.00000	0.16240	0.40299
R2	458.00000	0.28465	458.00000	0.20375	0.45139
R3	308.00000	0.19142	308.00000	0.15488	0.39354
R4	277.00000	0.17216	277.00000	0.14261	0.37763
E1	263.00000	0.16346	263.00000	0.13682	0.36990
E3	450.00000	0.27968	450.00000	0.20158	0.44898
HRSYR	3026907	1881.23493	6210985669	321308	566.83994
C2	56.00000	0.03480	56.00000	0.03361	0.18334
C3	88.00000	0.05469	88.00000	0.05173	0.22745
C4	4.00000	0.00249	4.00000	0.00248	0.04981
T2	1017.00000	0.63207	1017.00000	0.23270	0.48239
T3	165.00000	0.10255	165.00000	0.09209	0.30346
EARNINGS	25404900	15789	5.08832E11	66982416	8184.27859

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----- DSEX=1 -----

The REG Procedure
 Model: MODEL1
 Dependent Variable: EARNINGS

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	14	29792894761	2128063912	43.54	<.0001
Error	1594	77914830179	48880069		
Corrected Total	1608	1.077077E11			

Root MSE	6991.42826	R-Square	0.2766
Dependent Mean	15789	Adj R-Sq	0.2703
Coeff Var	44.27968		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t	Standardized Estimate
Intercept	1	5402.76784	1080.73032	5.00	<.0001	0

AGE	1	32.32344	14.79318	2.19	0.0290	0.05532
M2	1	-1703.09243	614.05544	-2.77	0.0056	-0.06034
M3	1	-4372.90514	516.05518	-8.47	<.0001	-0.21532
R2	1	48.07964	440.20211	0.11	0.9130	0.00265
R3	1	-1942.57895	506.74118	-3.83	0.0001	-0.09341
R4	1	-1678.01915	521.80393	-3.22	0.0013	-0.07743
E1	1	-1052.21915	500.91171	-2.10	0.0358	-0.04756
E3	1	-300.70901	419.07564	-0.72	0.4731	-0.01650
HRSYR	1	5.65308	0.32076	17.62	<.0001	0.39153
C2	1	4245.48564	1004.38321	4.23	<.0001	0.09511
C3	1	-517.73507	788.15406	-0.66	0.5113	-0.01439
C4	1	-9692.95510	3543.94261	-2.74	0.0063	-0.05900
T2	1	485.77553	411.39395	1.18	0.2379	0.02863
T3	1	-612.64396	666.12598	-0.92	0.3579	-0.02272