Obs	t1	t2	x2	y	x1	yc
1	52.9	4.4	-48.5	0	1	1
2	4.1	28.5	24.4	0	1	1
3	4.1	86.9	82.8	1	1	0
4	56.2	31.6	-24.6	0	1	1
5	51.8	20.2	-31.6	0	1	1
6	0.2	91.2	91.0	1	1	0
7	27.6	79.7	52.1	1	1	0
8	89.9	2.2	-87.7	0	1	1
9	41.5	24.5	-17.0	0	1	1
10	95.0	43.5	-51.5	0	1	1
11	99.1	8.4	-90.7	0	1	1
12	18.5	84.0	65.5	1	1	0
13	82.0	38.0	-44.0	1	1	0
14	8.6	1.6	-7.0	0	1	1
15	22.5	74.1	51.6	1	1	0
16	51.4	83.8	32.4	1	1	0
17	81.0	19.2	-61.8	0	1	1
18	51.0	85.0	34.0	1	1	0
19	62.2	90.1	27.9	1	1	0
20	95.1	22.2	-72.9	0	1	1
21	41.6	91.5	49.9	1	1	0

The SAS System

The Probit Procedure

Model Information	
Data Set	WORK.AUTO
Dependent Variable	yc
Number of Observations	21
Name of Distribution	Normal
Log Likelihood	-6.16515849

Number of Observations Read	21
Number of Observations Used	21

Class Level Information		
Name	Levels	Values
yc	2	0 1

Parameter Information	
Parameter	Effect
Intercept	Intercept
x2	x2

Response Profile		
Ordered Value	yc	Total Frequency
1	0	10
2	1	11

PROC PROBIT is modeling the probabilities of levels of yc having LOWER Ordered Values in the response profile table.

Algorithm converged.

Type III Analysis of Effects			
Effect	DF	Wald Chi-Square	Pr > ChiSq
x2	1	8.5047	0.0035

Analysis of Maximum Likelihood Parameter Estimates							
Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	-0.0644	0.3992	-0.8469	0.7181	0.03	0.8718
x2	1	0.0300	0.0103	0.0098	0.0502	8.50	0.0035

Estimated Covariance Matrix		
	Intercept	x2

Intercept	0.159396	0.000032610
x2	0.000032610	0.000106

Probit Model in Terms of Tolerance Distribution	
MU	**SIGMA**
2.14786514	33.3344679

Estimated Covariance Matrix for Tolerance Parameters		
	MU	**SIGMA**
MU	177.816361	9.626565
SIGMA	9.626565	130.655901

Obs	xstar	ihat	phat	pdf	partial
1	20	0.53555	0.70386	0.34564	0.010369

The SAS System

The Probit Procedure

Model Information	
Data Set	WORK.AUTO
Dependent Variable	yc
Number of Observations	21
Name of Distribution	Logistic
Log Likelihood	-6.166042212

Number of Observations Read	21
Number of Observations Used	21

Class Level Information		
Name	Levels	Values
yc	2	0 1

Parameter Information	
Parameter	Effect
Intercept	Intercept
x2	x2

Response Profile		
Ordered Value	yc	Total Frequency
1	0	10
2	1	11

PROC PROBIT is modeling the probabilities of levels of yc having LOWER Ordered Values in the response profile table.

Algorithm converged.

Type III Analysis of Effects			
Effect	DF	Wald Chi-Square	Pr > ChiSq
x2	1	6.6196	0.0101

Analysis of Maximum Likelihood Parameter Estimates							
Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	-0.2376	0.7505	-1.7085	1.2333	0.10	0.7516
x2	1	0.0531	0.0206	0.0127	0.0936	6.62	0.0101

Estimated Covariance Matrix		
	Intercept	x2

Intercept	0.563215	-0.002550
x2	-0.002550	0.000426

Probit Model in Terms of Tolerance Distribution	
MU	**SIGMA**
4.47328595	18.828907

Estimated Covariance Matrix for Tolerance Parameters		
	MU	**SIGMA**
MU	194.610748	-4.297136
SIGMA	-4.297136	53.556935

Obs	xstar	ihat	phat	pdf	partial
1	20	0.82462	0.69522	0.21189	0.011253

The SAS System

The LOGISTIC Procedure

Model Information	
Data Set	WORK.AUTO
Response Variable	yc
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Number of Observations Read	21
Number of Observations Used	21

Response Profile		
Ordered Value	yc	Total Frequency
1	0	10
2	1	11

Probability modeled is yc=0.

Model Convergence Status
Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics		
Criterion	Intercept Only	Intercept and Covariates
AIC	31.065	16.332
SC	32.109	18.421
-2 Log L	29.065	12.332

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	16.7325	1	<.0001
Score	12.8378	1	0.0003
Wald	6.6196	1	0.0101

Analysis of Maximum Likelihood Estimates					
Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-0.2376	0.7505	0.1002	0.7516
x2	1	0.0531	0.0206	6.6196	0.0101

Odds Ratio Estimates			

Effect	Point Estimate	95% Wald Confidence Limits	
x2	1.055	1.013	1.098

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	95.5	Somers' D	0.909
Percent Discordant	4.5	Gamma	0.909
Percent Tied	0.0	Tau-a	0.476
Pairs	110	c	0.955

Estimated Covariance Matrix		
Parameter	Intercept	x2
Intercept	0.563213	-0.00255
x2	-0.00255	0.000426