

```

DATA ANINHA;
INPUT
DOSE  HERB$  RESP  REP;
CARDS;
0.4   B      180   1
0.5   B      191   1
0.6   B      185   1
0.7   D      170   1
0.8   D      175   1
0.9   D      165   1
0.8   E      190   1
1     E      197   1
1.2   E      193   1
1     A      200   1
1.2   A      210   1
1.3   A      202   1
0.4   B      192   2
0.5   B      202   2
0.6   B      190   2
0.7   D      172   2
0.8   D      180   2
0.9   D      170   2
0.8   E      195   2
1     E      192   2
1.2   E      198   2
1     A      210   2
1.2   A      205   2
1.3   A      207   2
;
PROC GLM;
CLASS DOSE  HERB;
MODEL RESP = HERB DOSE(HERB);
MEANS HERB/  T  LINES;
LSMEANS DOSE(HERB) /SLICE= HERB;
LSMEANS DOSE(HERB) /ADJUST=T  LINES;RUN;

```

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	11	3767.458333	342.496212	14.45	<.0001
Error	12	284.500000	23.708333		
Corrected Total	23	4051.958333			

R-Square	Coeff Var	Root MSE	RESP Mean
0.929787	2.556528	4.869120	190.4583

Source	DF	Type I SS	Mean Square	F Value	Pr > F
HERB	3	3515.791667	1171.930556	49.43	<.0001
DOSE(HERB)	8	251.666667	31.458333	1.33	0.3177

Source	DF	Type III SS	Mean Square	F Value	Pr > F
HERB	3	3515.791667	1171.930556	49.43	<.0001
DOSE(HERB)	8	251.666667	31.458333	1.33	0.3177

t Tests (LSD) for RESP

NOTE: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	12
Error Mean Square	23.70833
Critical Value of t	2.17881
Least Significant Difference	6.1251

Means with the same letter are not significantly different.

t Grouping	Mean	N	HERB
A	205.667	6	A
B	194.167	6	E
B	190.000	6	B
C	172.000	6	D

DOSE	HERB	RESP LSMEAN
1	A	205.000000
1.2	A	207.500000
1.3	A	204.500000
0.4	B	186.000000
0.5	B	196.500000
0.6	B	187.500000
0.7	D	171.000000
0.8	D	177.500000
0.9	D	167.500000
0.8	E	192.500000
1	E	194.500000
1.2	E	195.500000

DOSE(HERB) Effect Sliced by HERB for RESP

HERB	DF	Sum of Squares	Mean Square	F Value	Pr > F
A	2	10.333333	5.166667	0.22	0.8073
B	2	129.000000	64.500000	2.72	0.1061
D	2	103.000000	51.500000	2.17	0.1566
E	2	9.333333	4.666667	0.20	0.8239

The GLM Procedure
Least Squares Means

T Comparison Lines for Least Squares Means of DOSE(HERB)

LS-means with the same letter are not significantly different.

		RESP LSMEAN	DOSE	HERB	LSMEAN Number
	A	207.5	1.2	A	2
	A				
B	A	205.0	1	A	1
B	A				
B	A	204.5	1.3	A	3
B	A				
B	C	196.5	0.5	B	5
B	C				
B	C	195.5	1.2	E	12
B	C				
B	C	194.5	1	E	11
	C				
	C	192.5	0.8	E	10
	C				
D	C	187.5	0.6	B	6
D	C				
D	C	186.0	0.4	B	4
D	C				
D	E	177.5	0.8	D	8
	E				
	E	171.0	0.7	D	7
	E				
	E	167.5	0.9	D	9

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparison should be used.