Obs	Α	В	С	D	у	AB	AC	AD	вс	BD	CD	ABC	ABD	ACD	BCD	ABCD
1	-1	-1	-1	-1	90	1	1	1	1	1	1	-1	-1	-1	-1	1
2	1	-1	-1	-1	74	-1	-1	-1	1	1	1	1	1	1	-1	-1
3	-1	1	-1	-1	81	-1	1	1	-1	-1	1	1	1	-1	1	-1
4	1	1	-1	-1	83	1	-1	-1	-1	-1	1	-1	-1	1	1	1
5	-1	-1	1	-1	77	1	-1	1	-1	1	-1	1	-1	1	1	-1
6	1	-1	1	-1	81	-1	1	-1	-1	1	-1	-1	1	-1	1	1
7	-1	1	1	-1	88	-1	-1	1	1	-1	-1	-1	1	1	-1	1
8	1	1	1	-1	73	1	1	-1	1	-1	-1	1	-1	-1	-1	-1
9	-1	-1	-1	1	98	1	1	-1	1	-1	-1	-1	1	1	1	-1
10	1	-1	-1	1	72	-1	-1	1	1	-1	-1	1	-1	-1	1	1
11	-1	1	-1	1	87	-1	1	-1	-1	1	-1	1	-1	1	-1	1
12	1	1	-1	1	85	1	-1	1	-1	1	-1	-1	1	-1	-1	-1
13	-1	-1	1	1	99	1	-1	-1	-1	-1	1	1	1	-1	-1	1
14	1	-1	1	1	79	-1	1	1	-1	-1	1	-1	-1	1	-1	-1
15	-1	1	1	1	87	-1	-1	-1	1	1	1	-1	-1	-1	1	-1
16	1	1	1	1	80	1	1	1	1	1	1	1	1	1	1	1
17	-1	-1	-1	-1	93	1	1	1	1	1	1	-1	-1	-1	-1	1
18	1	-1	-1	-1	78	-1	-1	-1	1	1	1	1	1	1	-1	-1
19	-1	1	-1	-1	85	-1	1	1	-1	-1	1	1	1	-1	1	-1
20	1	1	-1	-1	80	1	-1	-1	-1	-1	1	-1	-1	1	1	1
21	-1	-1	1	-1	78	1	-1	1	-1	1	-1	1	-1	1	1	-1
22	1	-1	1	-1	80	-1	1	-1	-1	1	-1	-1	1	-1	1	1
23	-1	1	1	-1	82	-1	-1	1	1	-1	-1	-1	1	1	-1	1
24	1	1	1	-1	70	1	1	-1	1	-1	-1	1	-1	-1	-1	-1
25	-1	-1	-1	1	95	1	1	-1	1	-1	-1	-1	1	1	1	-1
26	1	-1	-1	1	76	-1	-1	1	1	-1	-1	1	-1	-1	1	1
27	-1	1	-1	1	83	-1	1	-1	-1	1	-1	1	-1	1	-1	1
28	1	1	-1	1	86	1	-1	1	-1	1	-1	-1	1	-1	-1	-1
29	-1	-1	1	1	90	1	-1	-1	-1	-1	1	1	1	-1	-1	1
30	1	-1	1	1	75	-1	1	1	-1	-1	1	-1	-1	1	-1	-1
31	-1	1	1	1	84	-1	-1	-1	1	1	1	-1	-1	-1	1	-1
32	1	1	1	1	80	1	1	1	1	1	1	1	1	1	1	1

Class Level Information					
Class	Levels	Values			
Α	2	-1 1			
В	2	-1 1			
С	2	-1 1			
D	2	-1 1			
AB	2	-1 1			
AC	2	-1 1			
AD	2	-1 1			
вс	2	-1 1			
BD	2	-1 1			
CD	2	-1 1			
ABC	2	-1 1			
ABD	2	-1 1			
ACD	2	-11			
BCD	2	-1 1			
ABCD	2	-11			

Number of Observations Read	32
Number of Observations Used	32

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	15	1504.968750	100.331250	13.10	<.0001
Error	16	122.500000	7.656250		
Corrected Total	31	1627.468750			

R-Square	Coeff Var	Root MSE	y Mean
0.924730	3.342536	2.766993	82.78125

Source	DF	Type I SS	Mean Square	F Value	Pr > F
Α	1	657.0312500	657.0312500	85.82	<.0001
В	1	13.7812500	13.7812500	1.80	0.1984
С	1	57.7812500	57.7812500	7.55	0.0143
D	1	124.0312500	124.0312500	16.20	0.0010
AB	1	132.0312500	132.0312500	17.24	0.0007
AC	1	3.7812500	3.7812500	0.49	0.4923
AD	1	38.2812500	38.2812500	5.00	0.0399
вс	1	2.5312500	2.5312500	0.33	0.5733
BD	1	0.2812500	0.2812500	0.04	0.8504
CD	1	22.7812500	22.7812500	2.98	0.1038
ABC	1	215.2812500	215.2812500	28.12	<.0001
ABD	1	175.7812500	175.7812500	22.96	0.0002
ACD	1	7.0312500	7.0312500	0.92	0.3522
BCD	1	7.0312500	7.0312500	0.92	0.3522
ABCD	1	47.5312500	47.5312500	6.21	0.0241

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Α	1	657.0312500	657.0312500	85.82	<.0001
В	1	13.7812500	13.7812500	1.80	0.1984
С	1	57.7812500	57.7812500	7.55	0.0143
D	1	124.0312500	124.0312500	16.20	0.0010
AB	1	132.0312500	132.0312500	17.24	0.0007
AC	1	3.7812500	3.7812500	0.49	0.4923
AD	1	38.2812500	38.2812500	5.00	0.0399
вс	1	2.5312500	2.5312500	0.33	0.5733
BD	1	0.2812500	0.2812500	0.04	0.8504
CD	1	22.7812500	22.7812500	2.98	0.1038

Source	DF	Type III SS	Mean Square	F Value	Pr > F
ABC	1	215.2812500	215.2812500	28.12	<.0001
ABD	1	175.7812500	175.7812500	22.96	0.0002
ACD	1	7.0312500	7.0312500	0.92	0.3522
BCD	1	7.0312500	7.0312500	0.92	0.3522
ABCD	1	47.5312500	47.5312500	6.21	0.0241

Parameter	Estimate	Standard Error	t Value	Pr > t
A	9.06250000	0.97827974	9.26	<.0001
В	1.31250000	0.97827974	1.34	0.1984
С	2.68750000	0.97827974	2.75	0.0143
D	-3.93750000	0.97827974	-4.02	0.0010
AC	-0.68750000	0.97827974	-0.70	0.4923
АВ	-4.06250000	0.97827974	-4.15	0.0007
AD	2.18750000	0.97827974	2.24	0.0399
вс	0.56250000	0.97827974	0.57	0.5733
BD	0.18750000	0.97827974	0.19	0.8504
CD	-1.68750000	0.97827974	-1.72	0.1038
ABC	5.18750000	0.97827974	5.30	<.0001
ABD	-4.68750000	0.97827974	-4.79	0.0002
BCD	0.93750000	0.97827974	0.96	0.3522
ACD	0.93750000	0.97827974	0.96	0.3522
ABCD	-2.43750000	0.97827974	-2.49	0.0241

Class Level Information					
Class	Levels	Values			
Α	2	-1 1			
В	2	-1 1			
С	2	-1 1			
D	2	-1 1			
AB	2	-1 1			
AC	2	-1 1			
AD	2	-1 1			

Number of Observations Read	8
Number of Observations Used	8

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	324.0000000	81.0000000	1.96	0.3036
Error	3	124.0000000	41.3333333		
Corrected Total	7	448.0000000			

R-Square	Coeff Var	Root MSE	y Mean
0.723214	7.563648	6.429101	85.00000

Source	DF	Type I SS	Mean Square	F Value	Pr > F
Α	1	288.0000000	288.0000000	6.97	0.0777
В	1	2.0000000	2.0000000	0.05	0.8400
С	1	32.0000000	32.0000000	0.77	0.4437
D	1	2.0000000	2.0000000	0.05	0.8400

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Α	1	288.0000000	288.0000000	6.97	0.0777
В	1	2.0000000	2.0000000	0.05	0.8400
С	1	32.0000000	32.0000000	0.77	0.4437
D	1	2.0000000	2.0000000	0.05	0.8400

Monday, December 25, 2017 06:37:50 PM **8**

The GLM Procedure

Parameter	Estimate	Standard Error	t Value	Pr > t
A	-12.0000000	4.54606057	-2.64	0.0777
В	-1.0000000	4.54606057	-0.22	0.8400
С	4.0000000	4.54606057	0.88	0.4437
D	-1.0000000	4.54606057	-0.22	0.8400

Class Level Information					
Class	Levels	Values			
Α	2	-1 1			
В	2	-1 1			
С	2	-1 1			
D	2	-1 1			
E	2	-1 1			
AC	2	-1 1			
DC	2	-1 1			

Number of Observations Read	8
Number of Observations Used	8

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	2859.000000	714.750000	306.32	0.0003
Error	3	7.000000	2.333333		
Corrected Total	7	2866.000000			

R-Square	Coeff Var	Root MSE	y Mean
0.997558	4.927501	1.527525	31.00000

Source	DF	Type I SS	Mean Square	F Value	Pr > F
Α	1	220.500000	220.500000	94.50	0.0023
В	1	2312.000000	2312.000000	990.86	<.0001
С	1	242.000000	242.000000	103.71	0.0020
D	1	84.500000	84.500000	36.21	0.0092

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Α	1	220.500000	220.500000	94.50	0.0023
В	1	2312.000000	2312.000000	990.86	<.0001
С	1	242.000000	242.000000	103.71	0.0020
D	1	84.500000	84.500000	36.21	0.0092

Monday, December 25, 2017 06:37:50 PM **11**

The GLM Procedure

Parameter	Estimate	Standard Error	t Value	Pr > t
Α	10.5000000	1.08012345	9.72	0.0023
В	34.0000000	1.08012345	31.48	<.0001
С	11.0000000	1.08012345	10.18	0.0020
D	6.5000000	1.08012345	6.02	0.0092