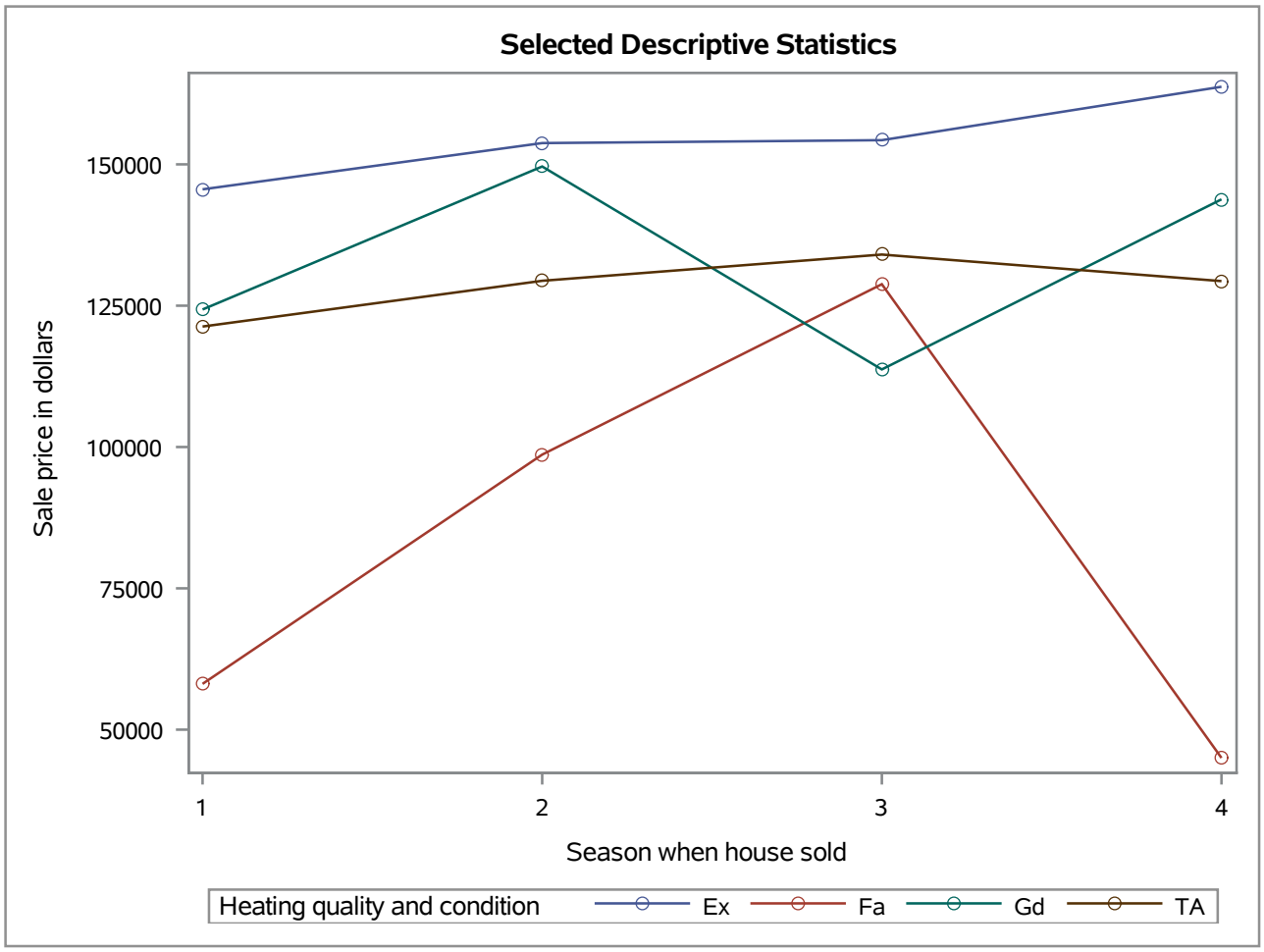
The MEANS Procedure

Analysis Variable : SalePrice Sale price in dollars					
Season when house sold	Heating quality and condition	N Obs	Mean	Variance	Std Dev
1	Ex	6	145583.33	1579141667	39738.42
	Fa	3	58100.00	321330000	17925.68
	Gd	10	124330.00	935189000	30580.86
	TA	16	121312.50	1679295833	40979.21
2	Ex	41	153765.24	1129742652	33611.64
	Fa	7	98657.14	452506190	21272.19
	Gd	18	149619.83	1082782633	32905.66
	TA	34	129404.41	767370965	27701.46
3	Ex	45	154279.42	1244833504	35282.20
	Fa	5	128800.00	1332825000	36507.88
	Gd	22	113727.27	1155184935	33988.01
	TA	58	134046.55	1138642444	33743.78
4	Ex	15	163726.93	2436449681	49360.41
	Fa	1	45000.00	.	.
	Gd	8	143812.50	547495536	23398.62
	TA	11	129345.45	462560727	21507.23


Selected Descriptive Statistics
Sale price in dollars
150000
125000
100000
75000
50000
1
2
3
4
Season when house sold
Heating quality and condition
Ex
Fa
Gd
TA

Model with Heating Quality and Season as Predictors

The GLM Procedure

Class Level Information		
Class	**Levels**	**Values**
Season_Sold	4	1 2 3 4
Heating_QC	4	Ex Fa Gd TA

Number of Observations Read	300
Number of Observations Used	300

Model with Heating Quality and Season as Predictors

The GLM Procedure

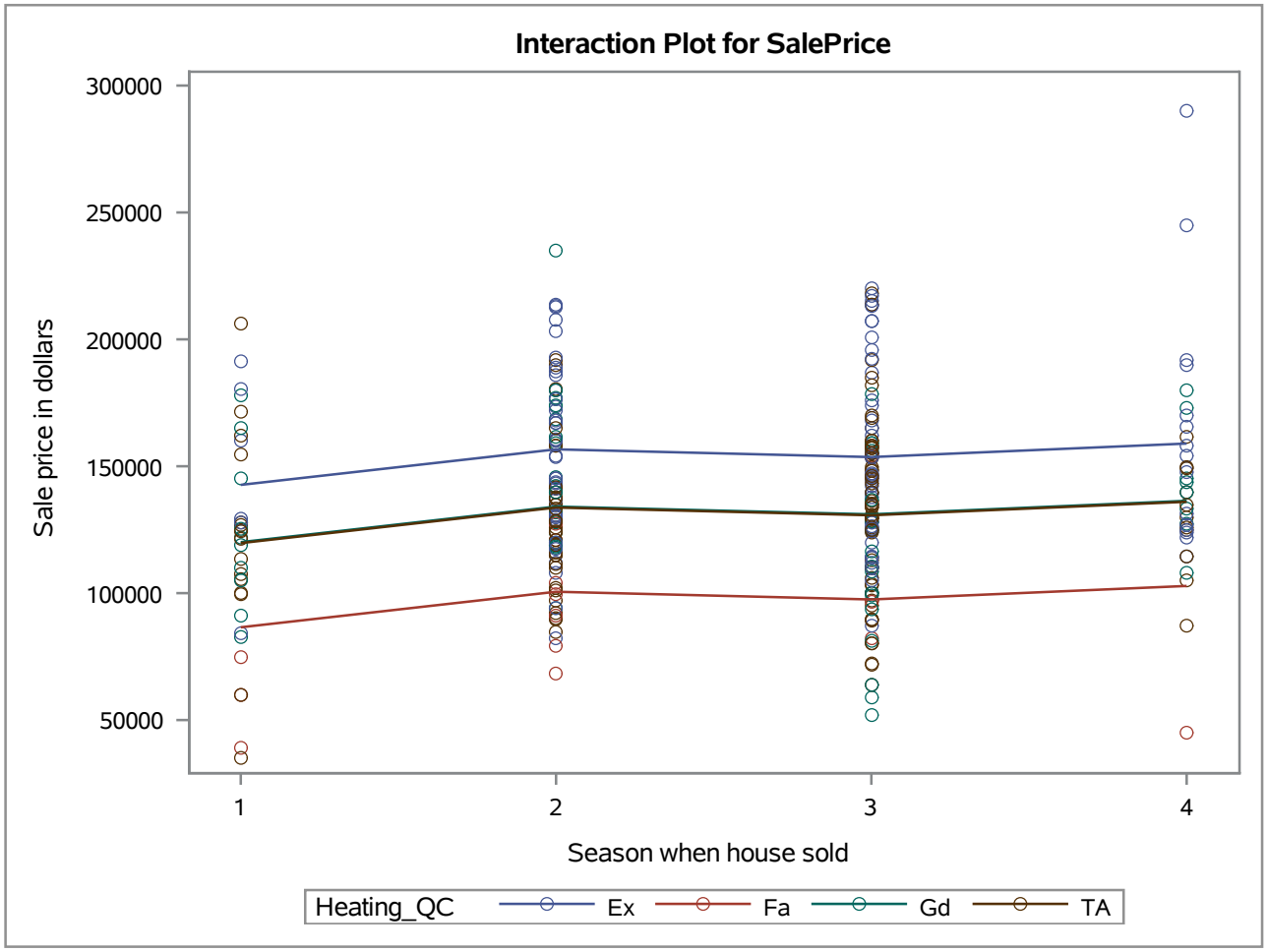
Dependent Variable: SalePrice Sale price in dollars

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	72774816066	12129136011	10.14	<.0001
Error	293	350448703445	1196070660.2		
Corrected Total	299	423223519511			

R-Square	Coeff Var	Root MSE	SalePrice Mean
0.171954	25.14764	34584.25	137524.9

Source	DF	Type I SS	Mean Square	F Value	Pr > F
Heating_QC	3	66835556221	22278518740	18.63	<.0001
Season_Sold	3	5939259845	1979753282	1.66	0.1768

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Heating_QC	3	60050783038	20016927679	16.74	<.0001
Season_Sold	3	5939259845	1979753282	1.66	0.1768



Model with Heating Quality and Season as Predictors

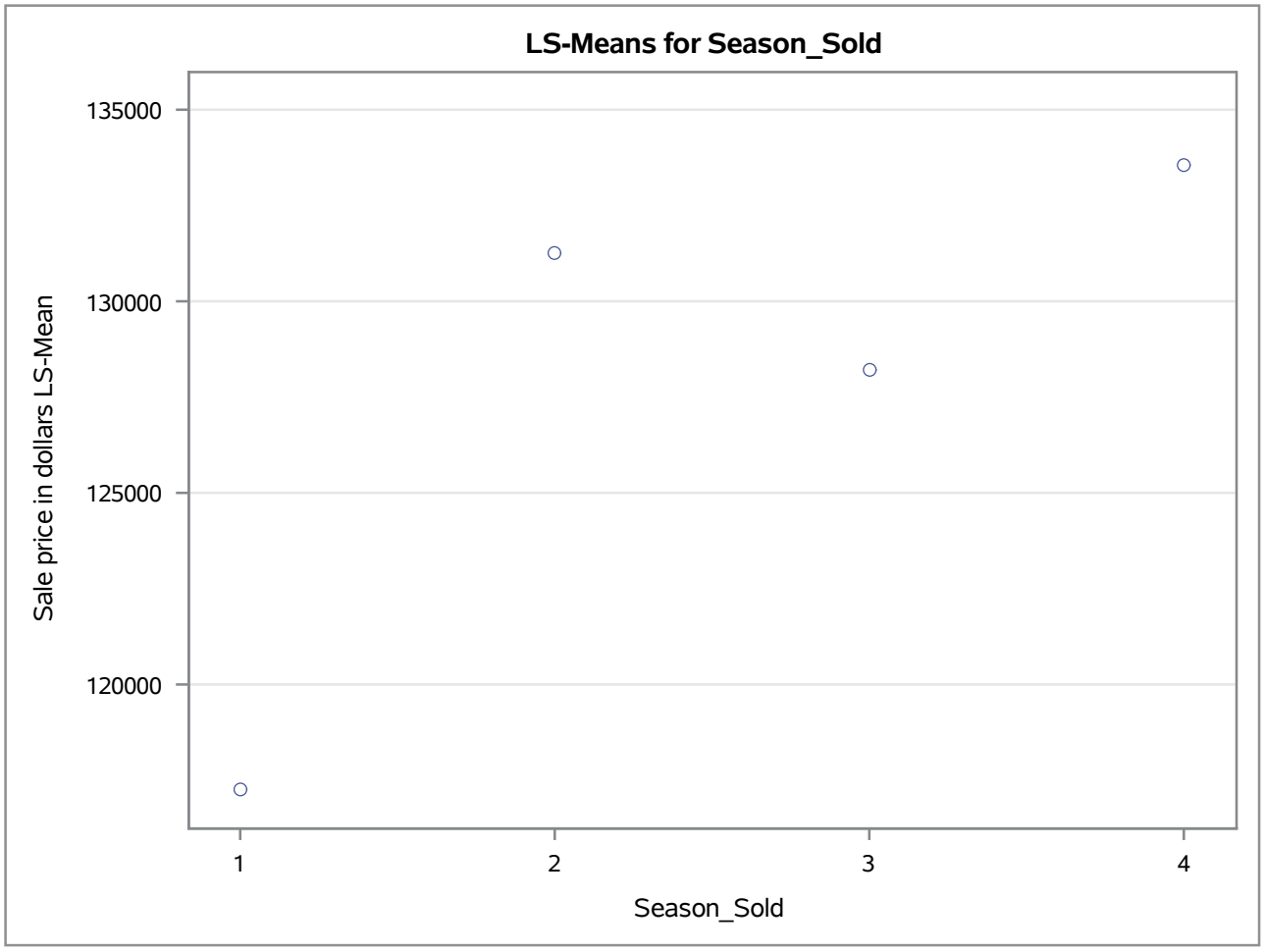
The GLM Procedure
Least Squares Means
Adjustment for Multiple Comparisons: Tukey-Kramer

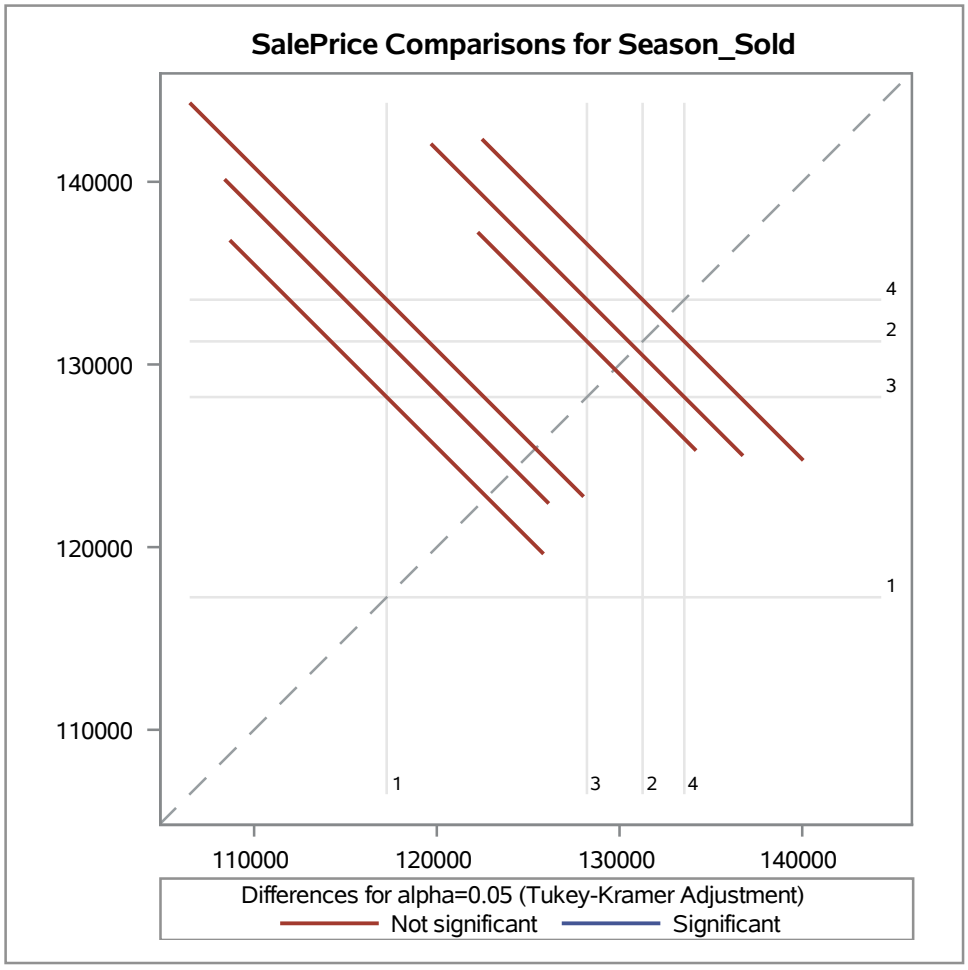
Season_Sold	SalePrice LSMEAN	LSMEAN Number
1	117255.605	1
2	131263.281	2
3	128216.231	3
4	133543.394	4

Least Squares Means for effect Season_Sold
Pr > |t| for H0: LSMean(i)=LSMean(j)

Dependent Variable: SalePrice

i/j	1	2	3	4
1		0.1760	0.3529	0.2089
2	0.1760		0.9124	0.9870
3	0.3529	0.9124		0.8517
4	0.2089	0.9870	0.8517	



Model with Heating Quality and Season as Predictors

The GLM Procedure
Least Squares Means
Adjustment for Multiple Comparisons: Tukey-Kramer