

The CONTENTS Procedure

Data Set Name	WORK.HOUSE_PRICE	Observations	11330
Member Type	DATA	Variables	17
Engine	V9	Indexes	0
Created	03/06/2025 13:33:36	Observation Length	312
Last Modified	03/06/2025 13:33:36	Deleted Observations	0
Protection		Compressed	NO
Data Set Type		Sorted	NO
Label			
Data Representation	SOLARIS_X86_64, LINUX_X86_64, ALPHA_TRU64, LINUX_IA64		
Encoding	utf-8 Unicode (UTF-8)		

Engine/Host Dependent Information	
Data Set Page Size	131072
Number of Data Set Pages	28
First Data Page	1
Max Obs per Page	419
Obs in First Data Page	406
Number of Data Set Repairs	0
Filename	/saswork/SAS_work9F4D0001BAEE_odaws01-usw2-2.oda.sas.com/SAS_work10030001BAEE_odaws01-usw2-2.oda.sas.com/house_price.sas7bdat
Release Created	9.0401M7
Host Created	Linux
Inode Number	738203837
Access Permission	rw-r--r--
Owner Name	u64126310
File Size	4MB
File Size (bytes)	3801088

Alphabetic List of Variables and Attributes					
#	Variable	Type	Len	Format	Informat
1	address	Char	34	\$34.	\$34.
4	bathrooms	Num	8	BEST12.	BEST32.
5	bedrooms	Num	8	BEST12.	BEST32.
6	finishedsqft	Num	8	BEST12.	BEST32.
2	info	Char	98	\$98.	\$98.
7	lastsolddate	Num	8	MMDDYY10.	MMDDYY10.
8	lastsoldprice	Num	8	BEST12.	BEST32.
9	latitude	Num	8	BEST12.	BEST32.
10	longitude	Num	8	BEST12.	BEST32.
11	neighborhood	Char	40	\$40.	\$40.
12	totalrooms	Num	8	BEST12.	BEST32.
13	usecode	Char	12	\$12.	\$12.
14	yearbuilt	Num	8	BEST12.	BEST32.
3	z_address	Char	25	\$25.	\$25.
15	zestimate	Num	8	BEST12.	BEST32.
16	zipcode	Num	8	BEST12.	BEST32.
17	zpid	Num	8	BEST12.	BEST32.

house_price original test

Obs	address	info	z_address	bathrooms	bedrooms	finishedsqft	lastsolddate	lastsoldprice	latitude	longitude	neighborhood	totalrooms	usecode	yearbuilt	zestimate	zipcode
1	Address: 1160 Mission Street #2007	San FranciscoSales price: 1300000Sales date: 02/17/2016Bedrooms: 2Square feet: 1043Lot size: 43557	1160 Mission St UNIT 2007	2	2	1043	02/17/2016	1300000	37.778705	-122.412635	South of Market	4	Condominium	2007	1167508	941
2	Address: 260 King Street #475	San FranciscoSales price: 750000Sales date: 02/17/2016Bedrooms: 1Square feet: 908Lot size: 213232	260 King St UNIT 475	1	1	903	02/17/2016	750000	37.777641	-122.393417	South of Market	3	Condominium	2004	823719	941
3	Address: 560 Missouri Street #B	San FranciscoSales price: 1495000Sales date: 02/17/2016Bedrooms: 3Square feet: 1425Lot size: 2496	560 Missouri St # B	4	3	1425	02/17/2016	1495000	37.759198	-122.396516	Potrero Hill	6	Condominium	2003	1708594	941
4	Address: 350 Missouri Street	San FranciscoSales price: 2700000Sales date: 02/17/2016Bedrooms: 3Square feet: 1984Lot size: 2469	350 Missouri St	3	3	2231	02/17/2016	2700000	37.761886	-122.396769	Potrero Hill	10	SingleFamily	1927	2411236	941
5	Address: 3658 Folsom Street	San FranciscoSales price: 1530000Sales date: 02/17/2016Bedrooms: 0Square feet: 924Lot size: 1750	3658 Folsom St	3	3	1300	02/17/2016	1530000	37.740795	-122.413453	Bernal Heights	4	SingleFamily	1900	1918539	941

House price using DATA

Obs	bathrooms	bedrooms	finishedsqft	lastsolddate	lastsoldprice	totalrooms	usecode	yearbuilt	zestimate	zipcode
1	2	2	1043	02/17/2016	1300000	4	Condominium	2007	1167508	94103
2	1	1	903	02/17/2016	750000	3	Condominium	2004	823719	94107
3	4	3	1425	02/17/2016	1495000	6	Condominium	2003	1708594	94107
4	3	3	2231	02/17/2016	2700000	10	SingleFamily	1927	2411236	94107
5	3	3	1300	02/17/2016	1530000	4	SingleFamily	1900	1918539	94110

House price using SQL method

Obs	bathrooms	bedrooms	finishedsqft	lastsolddate	lastsoldprice	totalrooms	usecode	yearbuilt	zestimate	zipcode
1	2	2	1043	02/17/2016	1300000	4	Condominium	2007	1167508	94103
2	1	1	903	02/17/2016	750000	3	Condominium	2004	823719	94107
3	4	3	1425	02/17/2016	1495000	6	Condominium	2003	1708594	94107
4	3	3	2231	02/17/2016	2700000	10	SingleFamily	1927	2411236	94107
5	3	3	1300	02/17/2016	1530000	4	SingleFamily	1900	1918539	94110

New variable DATA step results

Obs	bathrooms	bedrooms	finishedsqft	lastsolddate	lastsoldprice	totalrooms	usecode	yearbuilt	zestimate	zipcode	price_per_square_foot
1	2	2	1043	02/17/2016	1300000	4	Condominium	2007	1167508	94103	1246.40
2	1	1	903	02/17/2016	750000	3	Condominium	2004	823719	94107	830.56
3	4	3	1425	02/17/2016	1495000	6	Condominium	2003	1708594	94107	1049.12
4	3	3	2231	02/17/2016	2700000	10	SingleFamily	1927	2411236	94107	1210.22
5	3	3	1300	02/17/2016	1530000	4	SingleFamily	1900	1918539	94110	1176.92

sql with new variable

Obs	bathrooms	bedrooms	finishedsqft	lastsolddate	lastsoldprice	totalrooms	usecode	yearbuilt	zestimate	zipcode	price_per_square_foot_SQL
1	2	2	1043	02/17/2016	1300000	4	Condominium	2007	1167508	94103	1246.40
2	1	1	903	02/17/2016	750000	3	Condominium	2004	823719	94107	830.56
3	4	3	1425	02/17/2016	1495000	6	Condominium	2003	1708594	94107	1049.12
4	3	3	2231	02/17/2016	2700000	10	SingleFamily	1927	2411236	94107	1210.22
5	3	3	1300	02/17/2016	1530000	4	SingleFamily	1900	1918539	94110	1176.92

Average of lastsoldprice by zipcode

The MEANS Procedure

Analysis Variable : lastsoldprice		
zipcode	N Obs	Mean
94102	318	835957.49
94103	360	1057806.08
94104	1	1300000.00
94105	340	1202028.24
94107	857	1115271.06
94108	114	1479360.53
94109	653	1274315.54
94110	935	1235720.02
94111	38	1078907.89
94112	877	763993.29
94114	651	1685736.43
94115	534	1860896.42
94116	655	1019365.35
94117	473	1454416.58
94118	466	1835655.89
94121	527	1474686.53
94122	601	1070692.68
94123	430	2449347.67
94124	393	573805.64
94127	435	1365385.56
94131	687	1382432.57
94132	292	774159.25
94133	183	1718297.81
94134	439	650733.71
94158	71	976035.21

sql average lastsold by zipcode

zipcode	average_price
94102	835957.5

zipcode	average_price
94103	1057806
94104	1300000
94105	1202028
94107	1115271
94108	1479361
94109	1274316
94110	1235720
94111	1078908
94112	763993.3
94114	1685736
94115	1860896
94116	1019365
94117	1454417
94118	1835656
94121	1474687
94122	1070693
94123	2449348
94124	573805.6
94127	1365386
94131	1382433
94132	774159.2
94133	1718298
94134	650733.7
94158	976035.2

Average of lastsoldprice by usecode, totalrooms, and bedrooms.

The MEANS Procedure

Analysis Variable : lastsoldprice				
usecode	totalrooms	bedrooms	N Obs	Mean
Apartment	5	1	1	845000.00
		2	1	1850000.00
	7	2	1	1330000.00
Condominium	1	0	15	494366.67
		1	9	1141777.78
		2	2	1007500.00
	2	0	66	474083.33
		1	139	660961.15
		2	9	1158444.44
	3	0	11	488590.91
		1	795	684366.20
		2	67	980411.10
		3	8	2183875.00
		4	0	1537500.00
		1	428	787536.55
		2	774	1000287.19
		3	34	949911.76
	5	0	2	363000.00
		1	62	879108.87
		2	990	1173502.70
		3	184	1227470.11
		4	3	1335000.00
		6	1	1043375.00
		2	227	1351535.24
		3	418	1493546.65
		4	15	1488900.00
		20	1	965000.00
	7	1	6	1119666.67
		2	53	1326273.58
		3	157	1637920.38
		4	59	1573389.83
		5	2	3620000.00
	8	1	2	588000.00
		2	16	1231062.50
		3	52	1734625.00
		4	34	1896264.71
		5	2	1213250.00
		6	1	995000.00
		9	2	1292692.31
		3	35	1912014.29
		4	12	2245666.67
		5	2	3225000.00
	10	1	2	1420000.00
		2	5	1002800.00

Analysis Variable : lastsoldprice				
usecode	totalrooms	bedrooms	N Obs	Mean
		3	7	1612571.43
		4	6	2328666.67
	11	1	1	700000.00
		2	4	1187750.00
		3	3	1209333.33
		4	8	1916937.50
	12	1	2	715000.00
		2	4	1287500.00
		3	1	5500000.00
		4	2	906000.00
	13	2	4	1153750.00
		3	3	1362000.00
	14	1	1	2095000.00
		2	4	962500.00
	15	2	1	750000.00
		3	1	1288000.00
		4	1	3950000.00
	16	3	2	1135000.00
	17	2	1	2000000.00
		3	1	1065000.00
	18	2	1	1355000.00
		4	1	1225000.00
	20	2	1	850000.00
		5	1	1250000.00
		9	2	3800000.00
	23	4	2	1950000.00
	26	2	1	1678000.00
	94	2	1	325000.00
	1264	2	1	1375000.00
Cooperative	5	2	1	1080000.00
		3	1	1200000.00
	23	14	1	440000.00
Duplex	5	3	1	640000.00
	6	2	4	603750.00
		4	1	815000.00
	7	3	2	1142500.00
		4	1	554000.00
	8	2	1	1200000.00
		3	2	1342500.00
		4	9	1350166.67
		5	1	870000.00
	9	2	1	2300000.00
		3	5	870800.00
		4	4	1525000.00
	10	3	2	812500.00
		4	17	1296500.00
		5	2	1497500.00
	11	1	1	608500.00
		3	1	2965000.00
		4	5	1151100.00
		5	6	1524000.00
		7	2	1190000.00
	12	4	5	933600.00
		5	2	2100000.00
		6	11	1601681.82
		7	4	1728750.00
	13	1	1	460000.00
		3	1	910000.00
		4	2	1600000.00
		5	4	2506250.00
		6	6	1184166.67
		7	1	2123000.00
	14	2	1	2204500.00
		3	1	625000.00
		4	2	1150000.00
		5	1	1900000.00
		6	4	1888375.00
		7	3	1850000.00
	15	2	2	1993250.00
		6	4	745750.00
		7	4	1169000.00
		8	4	1465750.00
	16	3	1	1810000.00
		6	1	3849000.00

Analysis Variable : lastsoldprice				
usecode	totalrooms	bedrooms	N Obs	Mean
		7	1	1470000.00
		9	1	2150000.00
	17	3	1	1440000.00
		4	1	1320000.00
		7	1	1225000.00
	18	8	1	1709000.00
		9	2	1940000.00
	19	8	1	2200000.00
	20	8	2	2700000.00
	22	2	1	675000.00
	24	2	1	860000.00
Miscellaneous	1	2	1	1410000.00
	4	1	1	655000.00
		2	2	1155000.00
	5	2	2	2500000.00
	6	3	1	1000000.00
	7	2	1	1135000.00
		3	1	1099000.00
	8	3	1	1050000.00
	9	2	1	1700000.00
		4	1	3025000.00
	10	3	1	1100000.00
	12	4	1	2400000.00
	13	5	1	1700000.00
		7	1	1650000.00
	27	10	1	1625000.00
Mobile	4	2	1	1400000.00
	6	3	1	1994000.00
MultiFamily2	1	0	3	452500.00
		1	1	685000.00
	2	0	1	375000.00
		1	6	807250.00
		2	1	930000.00
	3	0	1	562500.00
		1	32	829328.13
		2	1	551000.00
	4	1	16	684937.50
		2	43	1091906.98
		3	2	1243750.00
	5	0	1	1600000.00
		1	7	993714.29
		2	26	1028711.54
		3	7	1052000.00
		6	1	1100000.00
		12	1	825000.00
	6	0	1	1275000.00
		1	4	820000.00
		2	11	1036545.45
		3	8	1691875.00
		4	1	2882000.00
		5	1	430000.00
	7	2	4	1029500.00
		3	7	1454285.71
		4	3	1883000.00
		5	2	2085000.00
		6	1	925000.00
		8	1	1250000.00
	8	0	3	926666.67
		1	2	482750.00
		2	5	1962800.00
		3	9	1234000.00
		4	11	1155863.64
		5	8	1126562.50
		6	1	850000.00
		7	1	2165000.00
	9	0	1	848000.00
		1	3	1573333.33
		2	4	1433750.00
		3	5	1148400.00
		4	13	853269.23
		5	12	1131383.33
		6	3	1768333.33
		7	1	1390000.00
		9	1	1250000.00

Analysis Variable : lastsoldprice				
usecode	totalrooms	bedrooms	N Obs	Mean
	10	0	6	1037500.00
		1	1	788000.00
		3	2	1607500.00
		4	22	1389272.73
		5	8	1539750.00
		6	5	1357600.00
		8	3	1711666.67
	11	0	1	375000.00
		3	2	1623000.00
		4	10	1554500.00
		5	11	2409181.82
		6	3	1895000.00
		7	1	392500.00
		8	1	1741000.00
	12	0	2	1802500.00
		2	6	888916.67
		3	1	875000.00
		4	9	1422722.22
		5	8	1477125.00
		6	7	1682571.43
		7	3	1516333.33
		9	1	2855000.00
	13	1	1	2038000.00
		2	1	3150000.00
		4	5	1616000.00
		5	1	1560000.00
		6	9	1541888.89
		7	2	1890000.00
		8	2	1200000.00
	14	2	1	780000.00
		5	4	1491250.00
		6	9	1974166.67
		7	3	1423333.33
		8	1	1499000.00
	15	0	1	1155000.00
		4	1	2100000.00
		5	1	801500.00
		6	2	2265000.00
		7	4	2565000.00
		8	3	1433333.33
		9	5	1467000.00
	16	2	2	2345000.00
		3	1	2130000.00
		4	2	1775000.00
		5	4	1632625.00
		6	4	1461250.00
		7	1	1890000.00
		8	1	2650000.00
		10	1	540000.00
	17	0	1	1950000.00
		5	1	1265000.00
		6	1	2400000.00
		9	3	1295000.00
	18	6	1	825000.00
		7	1	2160000.00
		9	2	1367500.00
		10	2	2633000.00
		12	1	2800000.00
	19	6	1	2100000.00
		16	1	2601388.00
	21	9	3	1381666.67
	23	5	1	3500000.00
	24	10	1	1767500.00
		16	1	1760000.00
	28	8	1	3600000.00
		16	1	1880000.00
	33	13	1	3350000.00
MultiFamily5	5	2	2	678000.00
SingleFamily	1	1	1	670000.00
	2	0	3	379000.00
		1	8	623875.00
		2	1	2100000.00
		4	2	565000.00
	3	1	37	730824.32

Analysis Variable : lastsoldprice				
usecode	totalrooms	bedrooms	N Obs	Mean
		2	6	925666.67
		3	2	1125000.00
		4	1	5250000.00
		5	1	955000.00
	4	0	4	2559250.00
		1	64	831281.25
		2	370	791819.59
		3	84	996799.02
		4	16	1470375.00
		5	2	850000.00
	5	0	2	527500.00
		1	27	1029629.63
		2	789	911582.72
		3	425	1003692.22
		4	50	1377670.00
		5	17	2080264.71
		6	3	516166.67
	6	1	5	1110600.00
		2	329	1059102.74
		3	804	1185621.21
		4	134	1282911.94
		5	18	1431644.44
		6	5	1522000.00
	7	0	4	839000.00
		1	4	769500.00
		2	101	1108831.97
		3	513	1362865.98
		4	293	1417419.80
		5	37	2050310.81
		7	4	936500.00
		8	2	844000.00
		9	2	1405000.00
	8	0	2	594000.00
		1	4	863125.00
		2	59	1224957.63
		3	299	1477341.47
		4	328	1752201.52
		5	52	1451913.46
		6	3	2020000.00
		8	1	738000.00
		11	1	1100000.00
	9	0	1	950000.00
		1	2	620000.00
		2	9	972222.22
		3	88	1795021.43
		4	173	2266106.29
		5	73	2212795.89
		6	14	1780964.29
		9	1	1575000.00
	10	2	13	1441807.69
		3	52	1824163.46
		4	101	2533079.91
		5	52	2977221.15
		6	14	2273280.00
		7	1	6050000.00
		8	1	16760000.00
	11	2	2	1050000.00
		3	17	1468588.24
		4	33	2587030.30
		5	30	3230750.00
		6	17	4272029.41
		7	5	4967200.00
	12	1	1	1800000.00
		2	2	799500.00
		3	10	1615500.00
		4	24	3155208.33
		5	21	3085285.71
		6	15	3250600.00
		7	3	6740000.00
	13	2	2	847500.00
		3	3	1532833.33
		4	14	2783285.71
		5	21	3955333.33
		6	7	5852857.14

Analysis Variable : lastsoldprice				
usecode	totalrooms	bedrooms	N Obs	Mean
		7	1	8600000.00
		8	1	1810000.00
	14	2	1	720000.00
		3	1	1510000.00
		4	6	2689250.00
		5	5	5490000.00
		6	6	5682666.67
		8	1	720000.00
	15	4	4	4352000.00
		5	2	4075000.00
		6	5	7453500.00
		7	1	7500000.00
	16	4	3	6740000.00
		5	4	3958750.00
		6	4	6170000.00
		7	2	7862500.00
		9	4	1530000.00
	17	4	1	6000000.00
		5	1	3900000.00
	18	3	1	990000.00
		6	2	11625000.00
		7	1	6500000.00
	19	5	1	3355000.00
	20	6	1	6800000.00
	23	7	1	6285000.00
	26	9	1	9600000.00
	28	7	1	23889000.00
Townhouse	2	1	1	1269000.00
	3	1	2	642500.00
		2	3	748666.67
	4	1	3	785000.00
		2	8	876875.00
		3	2	638500.00
	5	1	1	973000.00
		2	15	877735.67
		3	3	929333.33
	6	2	5	924200.00
		3	5	606200.00
	7	2	5	1002800.00
		3	3	881000.00
		4	3	641333.33
	8	1	1	1150000.00
		2	1	990000.00
		3	1	936000.00
	9	3	1	950000.00
	10	3	1	751000.00
		6	1	950000.00
	12	6	1	2625000.00

SQL avg lastsold by usecode, totalrooms, bedrooms

usecode	totalrooms	bedrooms	average_price
Apartment	5	1	845000
Apartment	5	2	1850000
Apartment	7	2	1330000
Condominium	1	0	494366.7
Condominium	1	1	1141778
Condominium	1	2	1007500
Condominium	2	0	474083.3
Condominium	2	1	660961.2
Condominium	2	2	1158444
Condominium	3	0	488590.9
Condominium	3	1	684366.2
Condominium	3	2	980411.1
Condominium	3	3	2183875
Condominium	4	0	1537500
Condominium	4	1	787536.6
Condominium	4	2	1000287
Condominium	4	3	949911.8
Condominium	5	0	363000
Condominium	5	1	879108.9
Condominium	5	2	1173503
Condominium	5	3	1227470

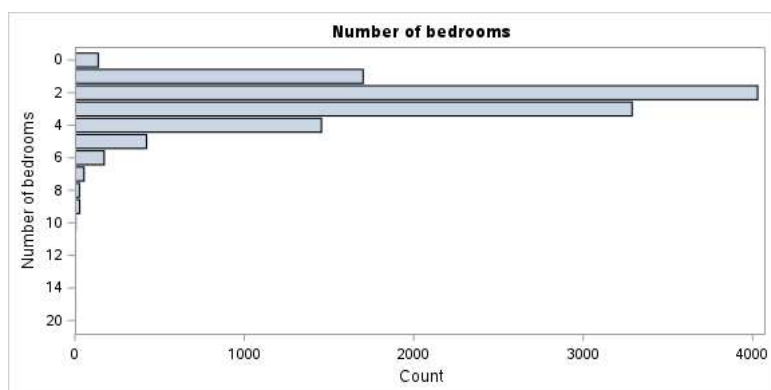
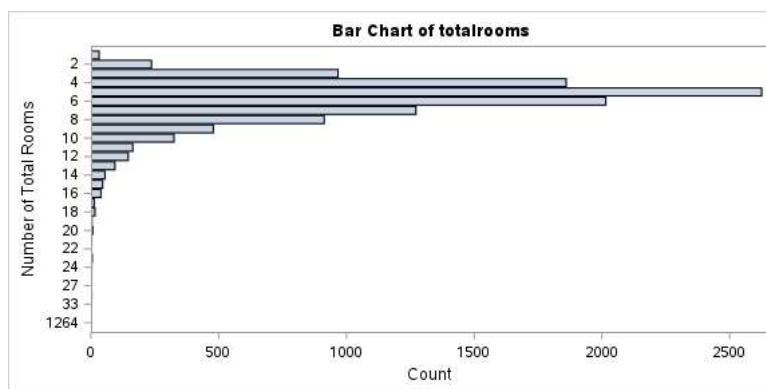
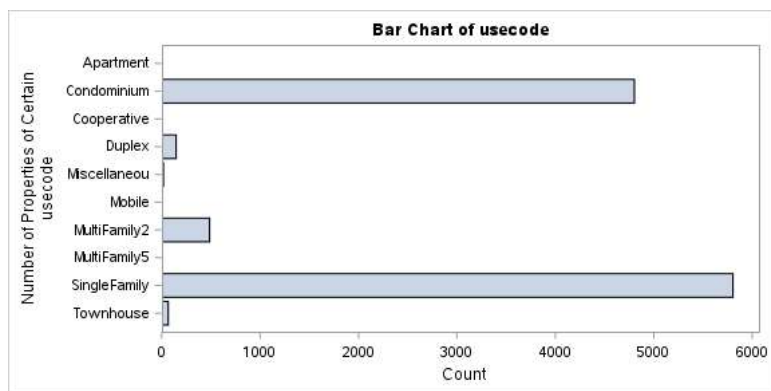
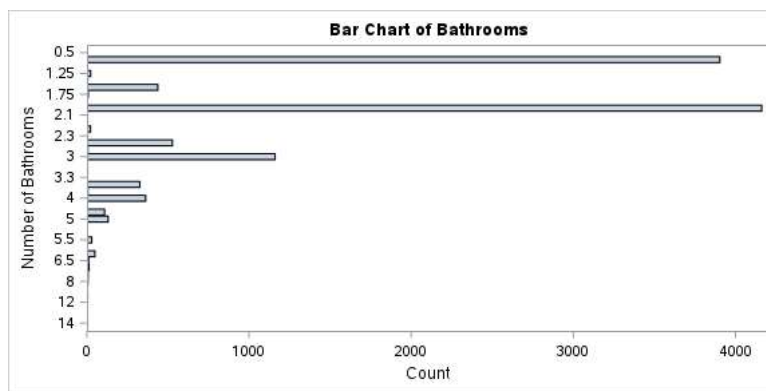
usecode	totalrooms	bedrooms	average_price
Condominium	5	4	1335000
Condominium	6	1	1043375
Condominium	6	2	1351535
Condominium	6	3	1493547
Condominium	6	4	1488900
Condominium	6	20	965000
Condominium	7	1	1119667
Condominium	7	2	1326274
Condominium	7	3	1637920
Condominium	7	4	1573390
Condominium	7	5	3620000
Condominium	8	1	588000
Condominium	8	2	1231063
Condominium	8	3	1734625
Condominium	8	4	1896265
Condominium	8	5	1213250
Condominium	8	6	995000
Condominium	9	2	1292692
Condominium	9	3	1912014
Condominium	9	4	2245667
Condominium	9	5	3225000
Condominium	10	1	1420000
Condominium	10	2	1002800
Condominium	10	3	1612571
Condominium	10	4	2328667
Condominium	11	1	700000
Condominium	11	2	1187750
Condominium	11	3	1209333
Condominium	11	4	1916938
Condominium	12	1	715000
Condominium	12	2	1287500
Condominium	12	3	5500000
Condominium	12	4	906000
Condominium	13	2	1153750
Condominium	13	3	1362000
Condominium	14	1	2095000
Condominium	14	2	962500
Condominium	15	2	750000
Condominium	15	3	1288000
Condominium	15	4	3950000
Condominium	16	3	1135000
Condominium	17	2	2000000
Condominium	17	3	1065000
Condominium	18	2	1355000
Condominium	18	4	1225000
Condominium	20	2	850000
Condominium	20	5	1250000
Condominium	20	9	3800000
Condominium	23	4	1950000
Condominium	26	2	1678000
Condominium	94	2	325000
Condominium	1264	2	1375000
Cooperative	5	2	1080000
Cooperative	5	3	1200000
Cooperative	23	14	440000
Duplex	5	3	640000
Duplex	6	2	603750
Duplex	6	4	815000
Duplex	7	3	1142500
Duplex	7	4	554000
Duplex	8	2	1200000
Duplex	8	3	1342500
Duplex	8	4	1350167
Duplex	8	5	870000
Duplex	9	2	2300000
Duplex	9	3	870800
Duplex	9	4	1525000
Duplex	10	3	812500
Duplex	10	4	1296500
Duplex	10	5	1497500
Duplex	11	1	608500
Duplex	11	3	2965000
Duplex	11	4	1151100
Duplex	11	5	1524000
Duplex	11	7	1190000

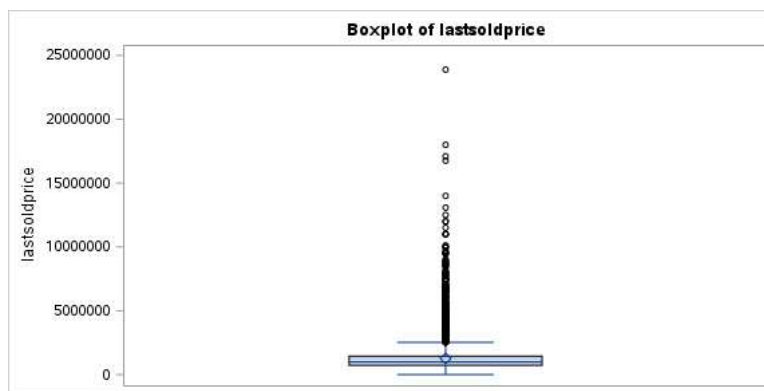
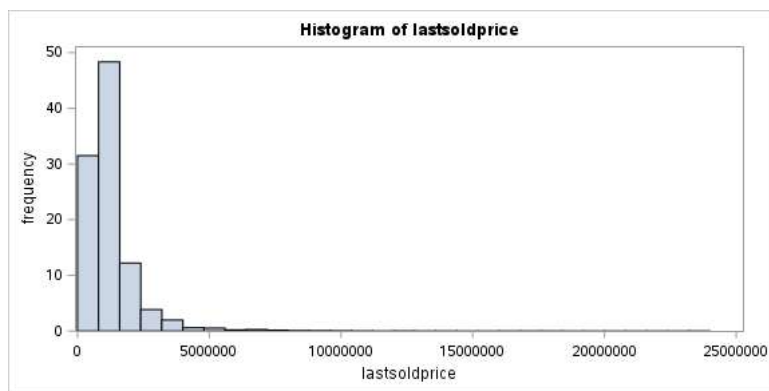
usecode	totalrooms	bedrooms	average_price
Duplex	12	4	933600
Duplex	12	5	2100000
Duplex	12	6	1601682
Duplex	12	7	1728750
Duplex	13	1	460000
Duplex	13	3	910000
Duplex	13	4	1600000
Duplex	13	5	2506250
Duplex	13	6	1184167
Duplex	13	7	2123000
Duplex	14	2	2204500
Duplex	14	3	625000
Duplex	14	4	1150000
Duplex	14	5	1900000
Duplex	14	6	1888375
Duplex	14	7	1850000
Duplex	15	2	1993250
Duplex	15	6	745750
Duplex	15	7	1169000
Duplex	15	8	1465750
Duplex	16	3	1810000
Duplex	16	6	3849000
Duplex	16	7	1470000
Duplex	16	9	2150000
Duplex	17	3	1440000
Duplex	17	4	1320000
Duplex	17	7	1225000
Duplex	18	8	1709000
Duplex	18	9	1940000
Duplex	19	8	2200000
Duplex	20	8	2700000
Duplex	22	2	675000
Duplex	24	2	860000
Miscellaneous	1	2	1410000
Miscellaneous	4	1	655000
Miscellaneous	4	2	1155000
Miscellaneous	5	2	2500000
Miscellaneous	6	3	1000000
Miscellaneous	7	2	1135000
Miscellaneous	7	3	1099000
Miscellaneous	8	3	1050000
Miscellaneous	9	2	1700000
Miscellaneous	9	4	3025000
Miscellaneous	10	3	1100000
Miscellaneous	12	4	2400000
Miscellaneous	13	5	1700000
Miscellaneous	13	7	1650000
Miscellaneous	27	10	1625000
Mobile	4	2	1400000
Mobile	6	3	1994000
MultiFamily2	1	0	452500
MultiFamily2	1	1	685000
MultiFamily2	2	0	375000
MultiFamily2	2	1	807250
MultiFamily2	2	2	930000
MultiFamily2	3	0	562500
MultiFamily2	3	1	829328.1
MultiFamily2	3	2	551000
MultiFamily2	4	1	684937.5
MultiFamily2	4	2	1091907
MultiFamily2	4	3	1243750
MultiFamily2	5	0	1600000
MultiFamily2	5	1	993714.3
MultiFamily2	5	2	1028712
MultiFamily2	5	3	1052000
MultiFamily2	5	6	1100000
MultiFamily2	5	12	825000
MultiFamily2	6	0	1275000
MultiFamily2	6	1	820000
MultiFamily2	6	2	1036545
MultiFamily2	6	3	1691875
MultiFamily2	6	4	2882000
MultiFamily2	6	5	430000
MultiFamily2	7	2	1029500
MultiFamily2	7	3	1454286

usecode	totalrooms	bedrooms	average_price
MultiFamily2	7	4	1883000
MultiFamily2	7	5	2085000
MultiFamily2	7	6	925000
MultiFamily2	7	8	1250000
MultiFamily2	8	0	926666.7
MultiFamily2	8	1	482750
MultiFamily2	8	2	1962800
MultiFamily2	8	3	1234000
MultiFamily2	8	4	1155864
MultiFamily2	8	5	1126563
MultiFamily2	8	6	850000
MultiFamily2	8	7	2165000
MultiFamily2	9	0	848000
MultiFamily2	9	1	1573333
MultiFamily2	9	2	1433750
MultiFamily2	9	3	1148400
MultiFamily2	9	4	853269.2
MultiFamily2	9	5	1131383
MultiFamily2	9	6	1768333
MultiFamily2	9	7	1390000
MultiFamily2	9	9	1250000
MultiFamily2	10	0	1037500
MultiFamily2	10	1	788000
MultiFamily2	10	3	1607500
MultiFamily2	10	4	1389273
MultiFamily2	10	5	1539750
MultiFamily2	10	6	1357600
MultiFamily2	10	8	1711667
MultiFamily2	11	0	375000
MultiFamily2	11	3	1623000
MultiFamily2	11	4	1554500
MultiFamily2	11	5	2409182
MultiFamily2	11	6	1895000
MultiFamily2	11	7	392500
MultiFamily2	11	8	1741000
MultiFamily2	12	0	1802500
MultiFamily2	12	2	888916.7
MultiFamily2	12	3	875000
MultiFamily2	12	4	1422722
MultiFamily2	12	5	1477125
MultiFamily2	12	6	1682571
MultiFamily2	12	7	1516333
MultiFamily2	12	9	2855000
MultiFamily2	13	1	2038000
MultiFamily2	13	2	3150000
MultiFamily2	13	4	1616000
MultiFamily2	13	5	1560000
MultiFamily2	13	6	1541889
MultiFamily2	13	7	1890000
MultiFamily2	13	8	1200000
MultiFamily2	14	2	780000
MultiFamily2	14	5	1491250
MultiFamily2	14	6	1974167
MultiFamily2	14	7	1423333
MultiFamily2	14	8	1499000
MultiFamily2	15	0	1155000
MultiFamily2	15	4	2100000
MultiFamily2	15	5	801500
MultiFamily2	15	6	2265000
MultiFamily2	15	7	2565000
MultiFamily2	15	8	1433333
MultiFamily2	15	9	1467000
MultiFamily2	16	2	2345000
MultiFamily2	16	3	2130000
MultiFamily2	16	4	1775000
MultiFamily2	16	5	1632625
MultiFamily2	16	6	1461250
MultiFamily2	16	7	1890000
MultiFamily2	16	8	2650000
MultiFamily2	16	10	540000
MultiFamily2	17	0	1950000
MultiFamily2	17	5	1265000
MultiFamily2	17	6	2400000
MultiFamily2	17	9	1295000
MultiFamily2	18	6	825000

usecode	totalrooms	bedrooms	average_price
MultiFamily2	18	7	2160000
MultiFamily2	18	9	1367500
MultiFamily2	18	10	2633000
MultiFamily2	18	12	2800000
MultiFamily2	19	6	2100000
MultiFamily2	19	16	2601388
MultiFamily2	21	9	1381667
MultiFamily2	23	5	3500000
MultiFamily2	24	10	1767500
MultiFamily2	24	16	1760000
MultiFamily2	28	8	3600000
MultiFamily2	28	16	1880000
MultiFamily2	33	13	3350000
MultiFamily5	5	2	678000
SingleFamily	1	1	670000
SingleFamily	2	0	379000
SingleFamily	2	1	623875
SingleFamily	2	2	2100000
SingleFamily	2	4	565000
SingleFamily	3	1	730824.3
SingleFamily	3	2	925666.7
SingleFamily	3	3	1125000
SingleFamily	3	4	5250000
SingleFamily	3	5	955000
SingleFamily	4	0	2559250
SingleFamily	4	1	831281.3
SingleFamily	4	2	791819.6
SingleFamily	4	3	996799
SingleFamily	4	4	1470375
SingleFamily	4	5	850000
SingleFamily	5	0	527500
SingleFamily	5	1	1029630
SingleFamily	5	2	911582.7
SingleFamily	5	3	1003692
SingleFamily	5	4	1377670
SingleFamily	5	5	2080265
SingleFamily	5	6	516166.7
SingleFamily	6	1	1110600
SingleFamily	6	2	1059103
SingleFamily	6	3	1185621
SingleFamily	6	4	1282912
SingleFamily	6	5	1431644
SingleFamily	6	6	1522000
SingleFamily	7	0	839000
SingleFamily	7	1	769500
SingleFamily	7	2	1108832
SingleFamily	7	3	1362866
SingleFamily	7	4	1417420
SingleFamily	7	5	2050311
SingleFamily	7	7	936500
SingleFamily	7	8	844000
SingleFamily	7	9	1405000
SingleFamily	8	0	594000
SingleFamily	8	1	863125
SingleFamily	8	2	1224958
SingleFamily	8	3	1477341
SingleFamily	8	4	1752202
SingleFamily	8	5	1451913
SingleFamily	8	6	2020000
SingleFamily	8	8	738000
SingleFamily	8	11	1100000
SingleFamily	9	0	950000
SingleFamily	9	1	620000
SingleFamily	9	2	972222.2
SingleFamily	9	3	1795021
SingleFamily	9	4	2266106
SingleFamily	9	5	2212796
SingleFamily	9	6	1780964
SingleFamily	9	9	1575000
SingleFamily	10	2	1441808
SingleFamily	10	3	1824163
SingleFamily	10	4	2533080
SingleFamily	10	5	2977221
SingleFamily	10	6	2273280
SingleFamily	10	7	6050000

usecode	totalrooms	bedrooms	average_price
SingleFamily	10	8	16760000
SingleFamily	11	2	1050000
SingleFamily	11	3	1468588
SingleFamily	11	4	2587030
SingleFamily	11	5	3230750
SingleFamily	11	6	4272029
SingleFamily	11	7	4967200
SingleFamily	12	1	1800000
SingleFamily	12	2	799500
SingleFamily	12	3	1615500
SingleFamily	12	4	3155208
SingleFamily	12	5	3085286
SingleFamily	12	6	3250600
SingleFamily	12	7	6740000
SingleFamily	13	2	847500
SingleFamily	13	3	1532833
SingleFamily	13	4	2783286
SingleFamily	13	5	3955333
SingleFamily	13	6	5852857
SingleFamily	13	7	8600000
SingleFamily	13	8	1810000
SingleFamily	14	2	720000
SingleFamily	14	3	1510000
SingleFamily	14	4	2689250
SingleFamily	14	5	5490000
SingleFamily	14	6	5682667
SingleFamily	14	8	720000
SingleFamily	15	4	4352000
SingleFamily	15	5	4075000
SingleFamily	15	6	7453500
SingleFamily	15	7	7500000
SingleFamily	16	4	6740000
SingleFamily	16	5	3958750
SingleFamily	16	6	6170000
SingleFamily	16	7	7862500
SingleFamily	16	9	1530000
SingleFamily	17	4	6000000
SingleFamily	17	5	3900000
SingleFamily	18	3	990000
SingleFamily	18	6	11625000
SingleFamily	18	7	6500000
SingleFamily	19	5	3355000
SingleFamily	20	6	6800000
SingleFamily	23	7	6285000
SingleFamily	26	9	9600000
SingleFamily	28	7	23889000
Townhouse	2	1	1269000
Townhouse	3	1	642500
Townhouse	3	2	748666.7
Townhouse	4	1	785000
Townhouse	4	2	876875
Townhouse	4	3	638500
Townhouse	5	1	973000
Townhouse	5	2	877735.7
Townhouse	5	3	929333.3
Townhouse	6	2	924200
Townhouse	6	3	606200
Townhouse	7	2	1002800
Townhouse	7	3	881000
Townhouse	7	4	641333.3
Townhouse	8	1	1150000
Townhouse	8	2	990000
Townhouse	8	3	936000
Townhouse	9	3	950000
Townhouse	10	3	751000
Townhouse	10	6	950000
Townhouse	12	6	2625000

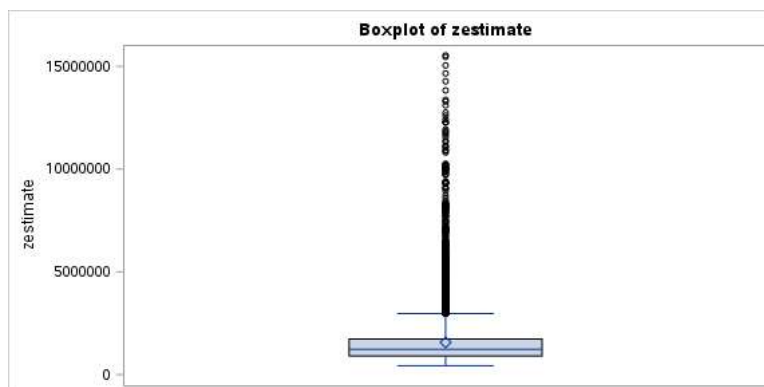
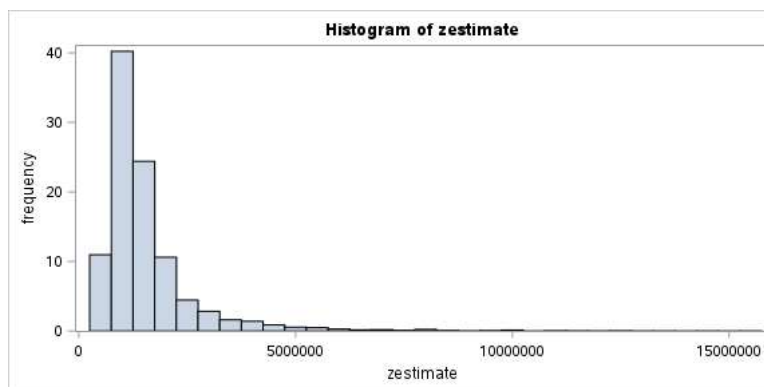




median of lastsoldprice

The MEANS Procedure

Analysis Variable : lastsoldprice	
	Median
	990000.00



median of zestimate

The MEANS Procedure

Analysis Variable : zestimate	
	Median
	1230758.00

Correlation of zestimate with numerical variables.

The CORR Procedure

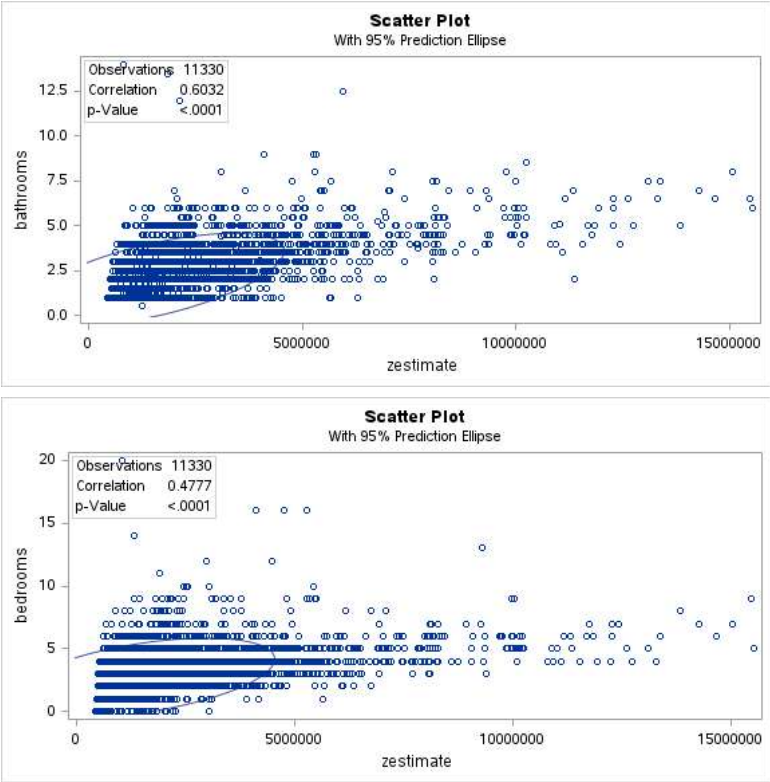
8 With Variables:	bathrooms bedrooms finishedsqft lastsoldprice totalrooms yearbuilt zestimate price_per_square_foot
1 Variables:	zestimate

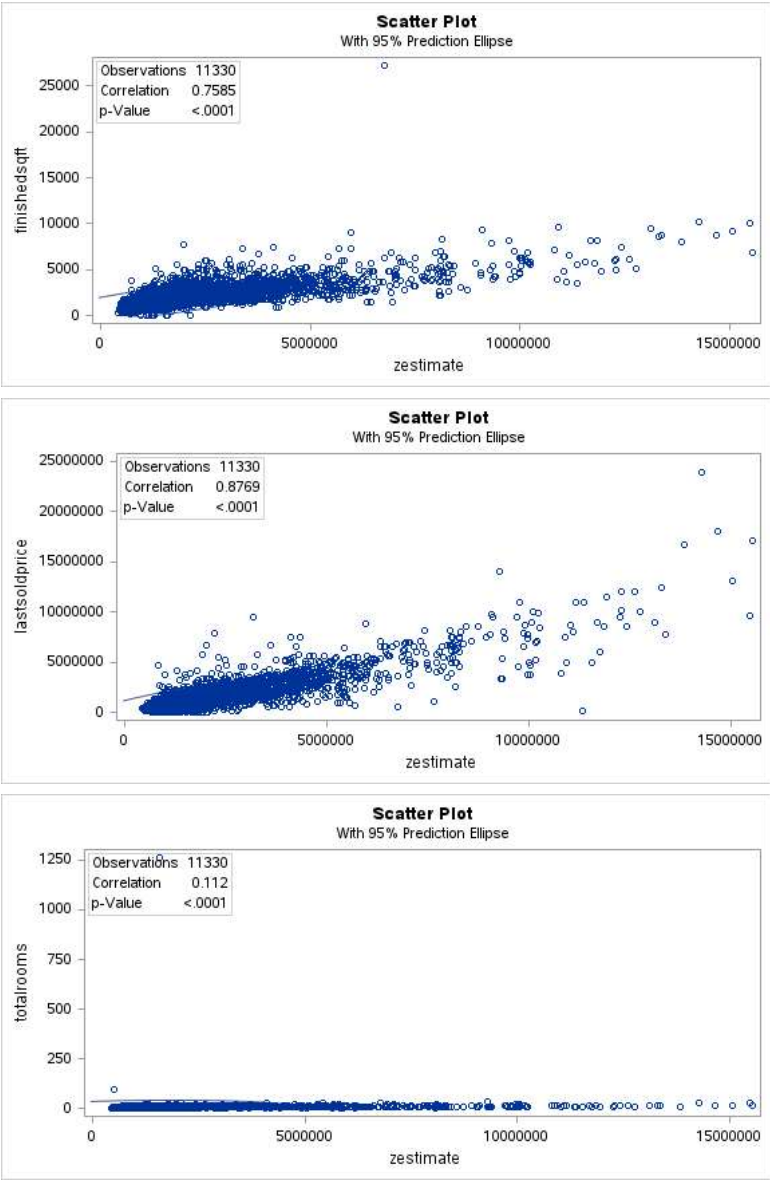
Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
bathrooms	11330	1.98023	1.04736	22436	0.50000	14.00000
bedrooms	11330	2.61447	1.29946	29622	0	20.00000
finishedsqft	11330	1585	921.97825	17962819	1.00000	27275
lastsoldprice	11330	1263928	1042079	1.43203E10	535.00000	23889000
totalrooms	11330	6.11156	12.12582	69244	1.00000	1264
yearbuilt	11330	1948	37.91120	22076484	1860	2016
zestimate	11330	1565695	1229417	1.77393E10	432385	15533253
price_per_square_foot	11330	1761	33861	19949622	0.46725	1930000

Pearson Correlation Coefficients, N = 11330 Prob > r under H0: Rho=0	
	zestimate
bathrooms	0.60316 <.0001
bedrooms	0.47768 <.0001
finishedsqft	0.75849 <.0001
lastsoldprice	0.87694 <.0001
totalrooms	0.11199 <.0001
yearbuilt	-0.21256 <.0001
zestimate	1.00000
price_per_square_foot	0.00093 0.9210

Correlation of zestimate with numerical variables.

The CORR Procedure





Regression model 1

The REG Procedure
Model: MODEL1
Dependent Variable: zestimate

Number of Observations Read	11330
Number of Observations Used	11330

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	1.424625E16	4.748749E15	18693.6	<.0001
Error	11326	2.877154E15	2.540309E11		
Corrected Total	11329	1.71234E16			

Root MSE	504015	R-Square	0.8320
Dependent Mean	1565695	Adj R-Sq	0.8319
Coeff Var	32.19112		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	1	-136521	10421	-13.10	<.0001
lastsoldprice	1	0.78058	0.00602	129.75	<.0001
finishedsqft	1	419.68249	8.25507	50.84	<.0001
bathrooms	1	25373	6566.18158	3.86	0.0001

Regression model 2

The REG Procedure
Model: MODEL1
Dependent Variable: zestimate

Number of Observations Read	11330
Number of Observations Used	11330

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	1.426167E16	2.852334E15	11286.8	<.0001
Error	11324	2.86173E15	2.527137E11		
Corrected Total	11329	1.71234E16			

Root MSE	502706	R-Square	0.8329
Dependent Mean	1565695	Adj R-Sq	0.8328
Coeff Var	32.10755		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	1	193236	270189	0.72	0.4745
lastsoldprice	1	0.77160	0.00612	126.10	<.0001
finishedsqft	1	447.00624	9.13460	48.94	<.0001
bathrooms	1	53029	7615.19000	6.96	<.0001
bedrooms	1	-45902	5930.75133	-7.74	<.0001
yearbuilt	1	-152.15986	137.06924	-1.11	0.2670

Predicted values

Obs	lastsoldprice	finishedsqft	bathrooms	bedrooms	yearbuilt	MODEL1
1	100000	800	1.0	1	2015	328525.84
2	350000	1500	3.5	3	2015	875099.00
3	1120000	2200	4.0	5	2011	1717456.08
4	2500000	2890	4.0	5	2016	3089940.78

The average (mean) of price_per_square_foot
By zipcode

Obs	zipcode	_TYPE_	_FREQ_	price_per_square_foot
1	.	0	11330	1760.78
2	94102	1	318	928.85
3	94103	1	360	3018.24
4	94104	1	1	866.67
5	94105	1	340	2856.13
6	94107	1	857	1659.79
7	94108	1	114	1001.95
8	94109	1	653	919.28
9	94110	1	935	3474.67
10	94111	1	38	823.54
11	94112	1	877	573.12
12	94114	1	651	1012.22
13	94115	1	534	940.64
14	94116	1	655	650.60
15	94117	1	473	2691.56
16	94118	1	466	834.23
17	94121	1	527	695.39
18	94122	1	601	642.40
19	94123	1	430	1188.12
20	94124	1	393	431.21
21	94127	1	435	710.00
22	94131	1	687	3703.84
23	94132	1	292	3190.92
24	94133	1	183	7832.94
25	94134	1	439	499.77
26	94158	1	71	21914.18

The average (mean) of zestimate
By totalrooms

Obs	totalrooms	_TYPE_	_FREQ_	zestimate
1	.	0	11330	1565695.261
2	1	1	32	864987.34375

Obs	totalrooms	_TYPE_	_FREQ_	zestimate
3	2	1	237	790535.90717
4	3	1	967	872228.56774
5	4	1	1860	1096498.8914
6	5	1	2625	1269967.613
7	6	1	2015	1530213.5012
8	7	1	1272	1738700.6682
9	8	1	913	1927580.8258
10	9	1	479	2472959.428
11	10	1	325	2840516.6615
12	11	1	164	3267640.75
13	12	1	146	3047366.2466
14	13	1	94	3692985.0638
15	14	1	55	3530035.1091
16	15	1	46	4273266.8913
17	16	1	39	4120780.2821
18	17	1	13	3178413.9231
19	18	1	16	4178196.1875
20	19	1	4	3739224.25
21	20	1	7	6404786.8571
22	21	1	3	2012261
23	22	1	1	5684941
24	23	1	5	3106397.4
25	24	1	3	3662498.3333
26	26	1	2	8765272
27	27	1	1	5430463
28	28	1	3	8381745
29	33	1	1	9304469
30	94	1	1	502285
31	1264	1	1	1591608