

MSDS 6371 - Kaggle Project

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Index Terms—Regression, Stepwise, R, QQ plot, residuals, Real Estate, Home Buying, Forward Regression, Log Transformation, SAS

I. INTRODUCTION

Kaggle is used by data scientists and machine learning engineers to discover data, build models, and compete in challenges. One of the most popular competitions in Kaggle is the House Prices – Advanced Regression Techniques. As of 4/8/2023, this competition has close to 25K entries. Sales price of a house can depend on numerous factors such as the neighborhood, size of the house, number of bedrooms etc. In this Kaggle competition, we have 79 explanatory variables for residential homes in Ames, Iowa. We will start the project by estimating the relationship of sales price with the square footage of the house referred to in the dataset as “GrLivArea” for neighborhoods Names, Edwards and BrkSide. Secondly, we will build predictive models for sales price of homes in all of Ames, Iowa using 4 different multiple linear regression models and record our prediction scores from Kaggle.

II. DATA COLLECTION

Descriptive Statistics				
Variable	Min	Max	Median	Mean
LotArea	1300	215245	9478	10517
YearBuilt	1872	2010	1973	1971
SquareFootage	334	5642	1464	1515
No.ofBedrooms	0	8	3	2.9
Garage(cars)	0	4	2	1.8
YearSold	2006	2010	2008	2008
SalesPrice	34900	755000	163000	180921

TABLE I

DESCRIPTIVE STATISTICS OF A FEW NUMERIC VARIABLES IN THE TRAIN DATA SET. A LINK TO THE DATA SET AT [HTTPS://WWW.KAGGLE.COM/C/HOUSE-PRICES-ADVANCED-REGRESSION-TECHNIQUES/DATA](https://www.kaggle.com/c/house-prices-advanced-regression-techniques/data)

The Ames Housing dataset was compiled by Dean De Cock and can be found in the link below. There are 2 files - train.csv and a test.csv. Both the datasets have 79 explanatory variables. Sales price is the response variable which is present in train and absent in test. The train dataset has 1460 unique rows and test dataset has 1459 unique rows. In the table 1, we have listed some descriptive stats from few important variables.

III. ANALYSIS 1

A. Restatement of Problem

Client: Century 21 Ames

Neighborhood Scope: NAmes, Edwards and BrkSide

Problem 1 -Build a model to estimate sales price (response variable) using square footage of living area (explanatory variable).

Problem 2 - Provide Century 21 Ames with written conclusion that quantifies the relationship between living are and sales price for the 3 neighborhoods in scope

B. Scatter plot

Based on the scatter plot of figure 1, we can visually see a positive linear relationship between sales price (\$) and square footage (sq. ft). There are few data points in Edwards neighborhood which will be addressed in the outlier analysis section.

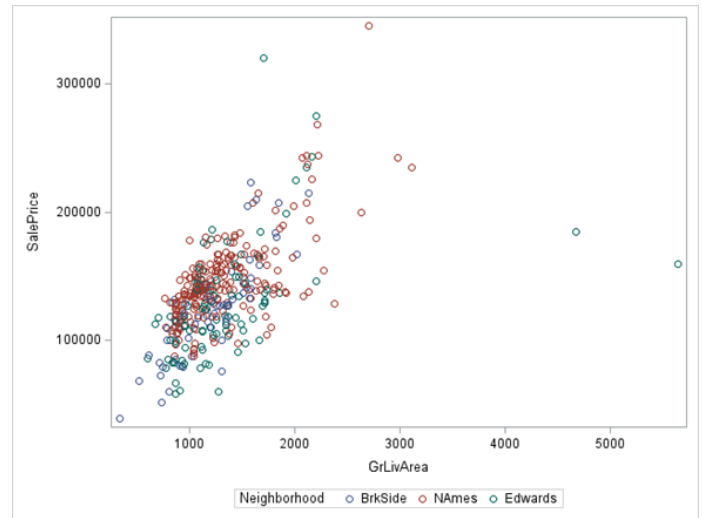


Fig. 1. Scatter plot between sales price and square footage with color grouping by neighborhood.

C. Outlier Analysis

There are 2 data points which has a high leverage and high negative residuals in the plot between Leverage and Residuals. We looked at this plot for non-transformed, linear-log transformed, log-linear transformed, and log-log well transformed data. These outliers are visible in all four plots. We have only included the non-transformed plot as shown in figure 2. Based on this outlier analysis, we closely inspected every single explanatory variable of the outlier data points We didn't find anything out of ordinary. We will limit our sample size to the population of 334(minimum value) to 4000(to exclude outliers) square feet for further analysis. We have also changed the GrLivArea to every 100 sq. ft for ease of interpretation to the clients.

D. Compare Models with Assumptions

Using the R2 and four assumptions for each model (as shown in table 2), we selected Log-Log transformation model as the best model for further analysis.

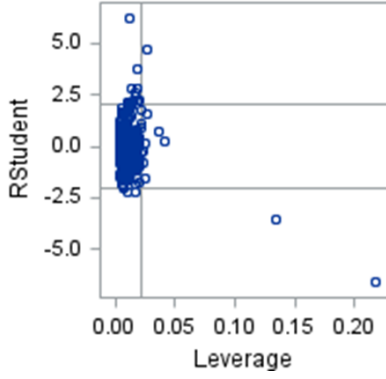


Fig. 2. A leverage vs. residual plot for the non transformed data.

Assumptions					
Model	Normality	Linearity	Equal Variance	Independence	R ²
Non-transform	ok	ok	no	ok	0.49
Log-Linear	ok	ok	ok	ok	0.48
Linear-Log	ok	ok	no	ok	0.48
Log-Log	ok	ok	ok	ok	0.50

TABLE II

MODEL COMPARISON WITH TRANSFORMED AND NON TRANSFORMED VARIABLES.

E. Assumptions

Normality: The histogram and qq- plot shows that the residual follows a normal distribution.

Linearity: Based on the scatter plot visually and low p-value of the slope (< 0.001), we can assume that there is linear relationship between Log Square Footage and Log Sales Price.

Equal Variance: Based on the scatter plot visually and low p-value of the slope (< 0.001), we can assume that there is linear relationship between Log Square Footage and Log Sales Price.

Independence: We will assume independence of the data based on the unique identifiers.

F. Model

We investigated 2 potentials models – Reduced and Full. Based on the scatterplot, we can assume that the slopes are different for the 3 neighborhoods. We confirmed our assumption using the ‘Extra Sum of Squares Test’ in table III using the reduced and full model as shown in table 2. Based

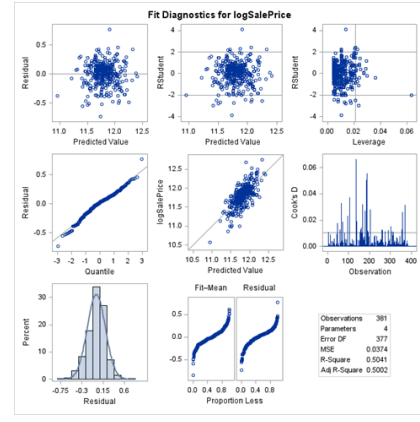


Fig. 3. Residual plot of log-log transformation for assumptions.

on the low p-value, we will use the full model with different slopes.

Reduced Model (with Names as reference Neighborhood)

$$\text{Median}\{\log\text{PredictedSalesPrice}|\log\text{GrLivArea}, \text{Neighborhood}\} = \beta_0 + \beta_1(\log\text{GrLivArea}) + \beta_2(\text{Edwards}) + \beta_3(\text{BrkSide})$$

Full Model (with Names as reference Neighborhood)

$$\text{Median}\{\log\text{PredictedSalesPrice}|\log\text{GrLivArea}, \text{Neighborhood}\} = \beta_0 + \beta_1(\log\text{GrLivArea}) + \beta_2(\text{Edwards}) + \beta_3(\text{BrkSide}) + \beta_4(\text{BrkSide} * \log\text{GrLivArea}) + \beta_5(\text{Edwards} * \log\text{GrLivArea})$$

Extra Sums of Squares test					
	df	SS	MS	F	p
Model	2	0.6762	0.3381	9.47	0.0001
Error	375	13.4183	0.0357		
Total	377	14.0945			

TABLE III

EXTRA SUM OF SQUARES MODEL FROM THE FULL MODEL AND REDUCED MODEL

Fitted Model

$$\begin{aligned} \text{Median}\{\log\text{PredictedSalesPrice}|\log\text{GrLivArea}, \text{Neighborhood}\} = & 10.67 + 0.473(\log\text{GrLivArea}) - 0.65(\text{Edwards}) \\ & - 0.98(\text{BrkSide}) + 0.35(\text{BrkSide} * \log\text{GrLivArea}) \\ & + 0.2(\text{Edwards} * \log\text{GrLivArea}) \end{aligned}$$

G. Regression Equations for 3 Neighborhoods

$$\begin{aligned} \text{Median}\{\log\text{PredictedSalesPrice}|\log\text{GrLivArea}, \text{Names}\} & = 10.67 + 0.473(\log\text{GrLivArea}) \\ \text{Median}\{\log\text{PredictedSalesPrice}|\log\text{GrLivArea}, \text{Edwards}\} & = 10.67 + 0.673(\log\text{GrLivArea}) \\ \text{Median}\{\log\text{PredictedSalesPrice}|\log\text{GrLivArea}, \text{BrkSide}\} & = 10.67 + 0.823(\log\text{GrLivArea}) \end{aligned}$$

H. Estimates table and 95% Confidence Limits

I. Interpretation

- The intercept interpretation is not practical since the scope of our population is from 334 sq.ft. The extrapolation to 0 sq. ft has no practical significance.
- For NAmes – A doubling of every 100 sq. ft of residential living area(in the population of 334 – 4000 sq.ft) is associated with 1.4 times the increase in median sales price. In other words

Neighborhood	Estimates			
	Intercept	Slope	95% CI Intercept	95% CI Slope
NAMES	10.67	0.47	10.45-10.9	0.38-0.56
Edwards	10.02	0.67	9.68-10.37	0.54-0.81
BrkSide	9.69	0.82	9.35-10.03	0.68-0.96

TABLE IV
EXTRA SUM OF SQUARES MODEL FROM THE FULL MODEL AND REDUCED MODEL

the estimated median sales price increases by 40 %, when the residential living area of 100 ft is doubled. We are 95% confident that the increase in median sales price is between 30% and 47% with the best estimate at 40%.

- For Edwards – A doubling of every 100 sq. ft of residential living area (in the population of 334 – 4000 sq. ft) is associated with 1.6 times the increase in median sales price. In other words, the estimated median sales price increases by 60 %, when the residential living area of 100 ft is doubled. We are 95% confident that the increase in median sales price is between 45% and 75% with the best estimate at 60%.
- For BrkSide – A doubling of every 100 sq. ft of residential living area (in the population of 334 – 4000 sq. ft) is associated with 1.8 times the increase in median sales price. In other words, the estimated median sales price increases by 77 %, when the residential living area of 100 ft is doubled. We are 95% confident that the increase in median sales price is between 60% and 94% with the best estimate at 77%.

J. Conclusion

Based on our analysis, we can confidently say that BrkSide neighborhood is the higher priced neighborhood compared to Edwards and NAMES for houses between 334 and 4000 sq.ft. In this analysis, we only looked at one explanatory variable which is the probable cause of lower R2. Since house prices depend on numerous other factors, this analysis can be used as a precursor to a more detailed analysis. We have created a RShiny app for our clients to look at the relationship between the Square Footage and Sales Price of the 3 neighborhoods along with few other explanatory variables. RShiny Link:

<https://bhandarianish.shinyapps.io/kaggle/?ga=2.49838821.237813559.1680986640-1080280209.1680806898>

IV. ANALYSIS 2

A. Restatement of Problem

Scope: All Dataset

Problem 1 -Build a predictive model using **forward** regression technique to estimate sales price (response variable) using any explanatory variables in dataset. Obtain Kaggle score.

Problem 2 -Build a predictive model using **backward** regression technique to estimate sales price (response variable) using any explanatory variables in dataset. Obtain Kaggle score.

Problem 3 -Build a predictive model using **stepwise** regression technique to estimate sales price (response variable) using any explanatory variables in dataset. Obtain Kaggle score.

Problem 4 -Build a predictive model using **custom** regression technique to estimate sales price (response variable) using any explanatory variables in dataset. Obtain Kaggle score.

B. Model Selection and Assumptions

We selected 4 models to predict sales price of the test dataset. StepAIC from the R package “MASS” was used to conduct all 4-regression analysis. Custom model was run in the stepwise direction. We have only included 2 residual plot and 2 qq-plot. Rest of the plots can be found in appendix.

- **Normality:** The qq- plot shows that the residual follows a normal distribution with slight skew on the tails. We will assume normality.
- **Linearity:** We used correlation plot during explanatory variable selection. This helped us with linearity assumption. Also, the low Kaggle score validates our linearity assumption.
- **Equal Variance:** The residual plot shows that the data are evenly distributed for the most part except slight increase towards the higher house prices. We will assume that the variances are equal and proceed with caution.
- **Independence:** We will assume independence of the data based on the unique identifiers.
- **Outliers:** Due to some high leveraged and high residual outliers, we trained our regression models to the sales price up to \$ 500,000 and lot area less than 10,000 sq.ft. There were few rows we considered omitting due to high leverage. However, we decided against this measure as no anomaly was found upon close inspection of these unique identifiers.

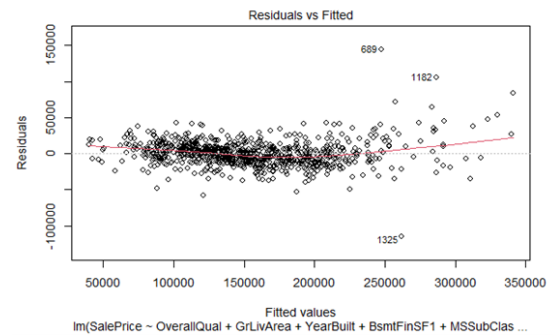


Fig. 4. Residuals vs. Fitted plot of the Stepwise Regression

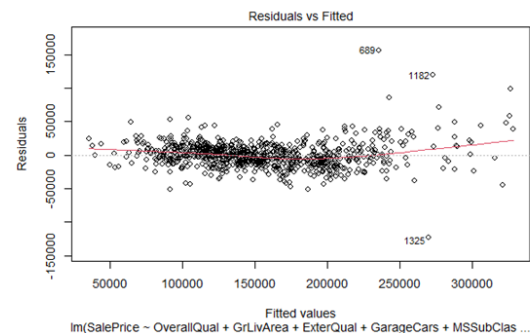


Fig. 5. Residuals vs. Fitted plot of the Forward Regression

C. Comparing Models

All four models had very similar adjusted R2, CV Press and Kaggle score. Based on the Kaggle score, our best model is stepwise regression model with the Kaggle score of 0.157.

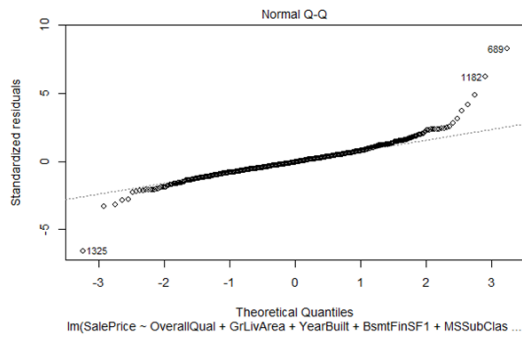


Fig. 6. QQ plot of the Stepwise Regression

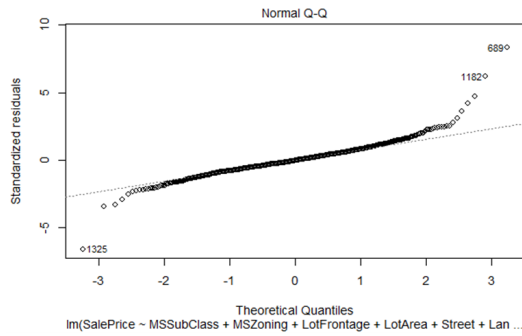


Fig. 7. QQ plot of the Forward Regression

Predictive Model Comparison			
Predictive Models	Adjusted R^2	CV PRESS	Kaggle Score
Forward	.89	3.41×10^8	0.159
Backward	.89	3.85×10^8	0.158
Stepwise	.89	3.41×10^8	0.157
Custom	.88	3.82×10^8	0.165

TABLE V
PREDICTIVE MODEL METRIC COMPARISON

D. Conclusion

Multiple linear regression model is a simple technique to perform prediction analysis on a response variable. The quality of data is very important in any model and more so in multiple linear regression. Based on our experience, stepwise regression model paired with domain knowledge customization, is the best technique to use among the multiple linear regression techniques. In our case, due to lack of domain knowledge, it wasn't as useful as it could have been. In future, we will use other modeling techniques to compare our Kaggle score from this project.

V. APPENDIX

A. Analysis I

```
/*Importing the dataset*/
PROC IMPORT OUT= project
    DATAFILE= "D:\Downloads\train(1).csv"
    DBMS=CSV REPLACE;
    GETNAMES=YES;
RUN;
/*filtering the dataset for specific neighborhoods*/
data project1;
set project;
where Neighborhood = 'NAmes' or Neighborhood = 'Edwards' or Neighborhood='BrkSide';
run;
/*Scatter plot of the normal data*/
proc sgplot data = project1;
    scatter y=SalePrice x=GrLivArea / group=Neighborhood;
run;

/*Regression plot with normal data*/
proc glm data = project1 plots= all;
class Neighborhood(ref = 'NAmes');
model SalePrice= GrLivArea Neighborhood / solution clparm;
run;
/*reducing the sq footage by 100 and performing a log transformation*/
data df;
set project1;
GrLivArea = GrLivArea / 100;
logGrLivArea = log(GrLivArea);
logSalePrice = log(SalePrice);
run;
/*log log regresion model*/
proc glm data = df plots= all;
class Neighborhood(ref = 'NAmes');
model logSalePrice= logGrLivArea Neighborhood / solution clparm;
run;
/*Excluding the outlier with high leverage*/
data temp;
set df;
where GrLivArea < 40;
run;
/*logging the data*/
data temp;
set temp;
logGrLivArea = log(GrLivArea);
logSalePrice = log(SalePrice);
run;
/*log-log transformation*/
proc glm data = temp plots= all;
class Neighborhood(ref = 'NAmes');
model logSalePrice= logGrLivArea Neighborhood / solution clparm;
run;

/*log-log transformation with interaction variables*/
proc glm data = temp plots= all;
class Neighborhood(ref = 'NAmes');
model logSalePrice= logGrLivArea | Neighborhood / solution clparm;
run;
```

STATS PROJECT

William Jones

2023-04-04

```
#Data PreProcessing
```

```
library(Hmisc)
```

```
## Warning: package 'Hmisc' was built under R version 4.2.3
```

```
##
```

```
## Attaching package: 'Hmisc'
```

```
## The following objects are masked from 'package:base':
```

```
##
```

```
##      format.pval, units
```

```
test = read.csv("D:/Downloads/test(1).csv")
```

```
train = read.csv("D:/Downloads/train(1).csv")
```

```
#Converting Categorical Variables to Factors
```

```
train[c(3,6:17,22:26,28:34,36,40:43,54,56,58,59,61,64:66,73:75,79:80)] <-lapply(train[c(3,6:17,22:26,28:34,36,40:43,54,56,58,59,61,64:66,73:75,79:80)],
```

```
test[c(3,6:17,22:26,28:34,36,40:43,54,56,58,59,61,64:66,73:75,79:80)] <-lapply(test[c(3,6:17,22:26,28:34,36,40:43,54,56,58,59,61,64:66,73:75,79:80)],
```

```
#Converting all categorical variables to numeric
```

```
train[, c(3,6:17,22:26,28:34,36,40:43,54,56,58,59,61,64:66,73:75,79:80)] <- sapply(train[, c(3,6:17,22:26,28:34,36,40:43,54,56,58,59,61,64:66,73:75,79:80)],
```

```
test[, c(3,6:17,22:26,28:34,36,40:43,54,56,58,59,61,64:66,73:75,79:80)] <- sapply(test[, c(3,6:17,22:26,28:34,36,40:43,54,56,58,59,61,64:66,73:75,79:80)],
```

```
#adding 0 for NA
```

```
train[is.na(train)] = 0
```

```
#adding 0 for NA
```

```
test[is.na(test)] = 0
```

```
#Inital Analysis of correlations from the Train Data
```

```
library(ggplot2)
```

```
library(lattice)
```

```
## Warning: package 'lattice' was built under R version 4.2.3
```

```
#create a correlation matrix rounding to two decimals
corr_matrix <- round(cor(train[,sapply(train,is.numeric)]),2)
```

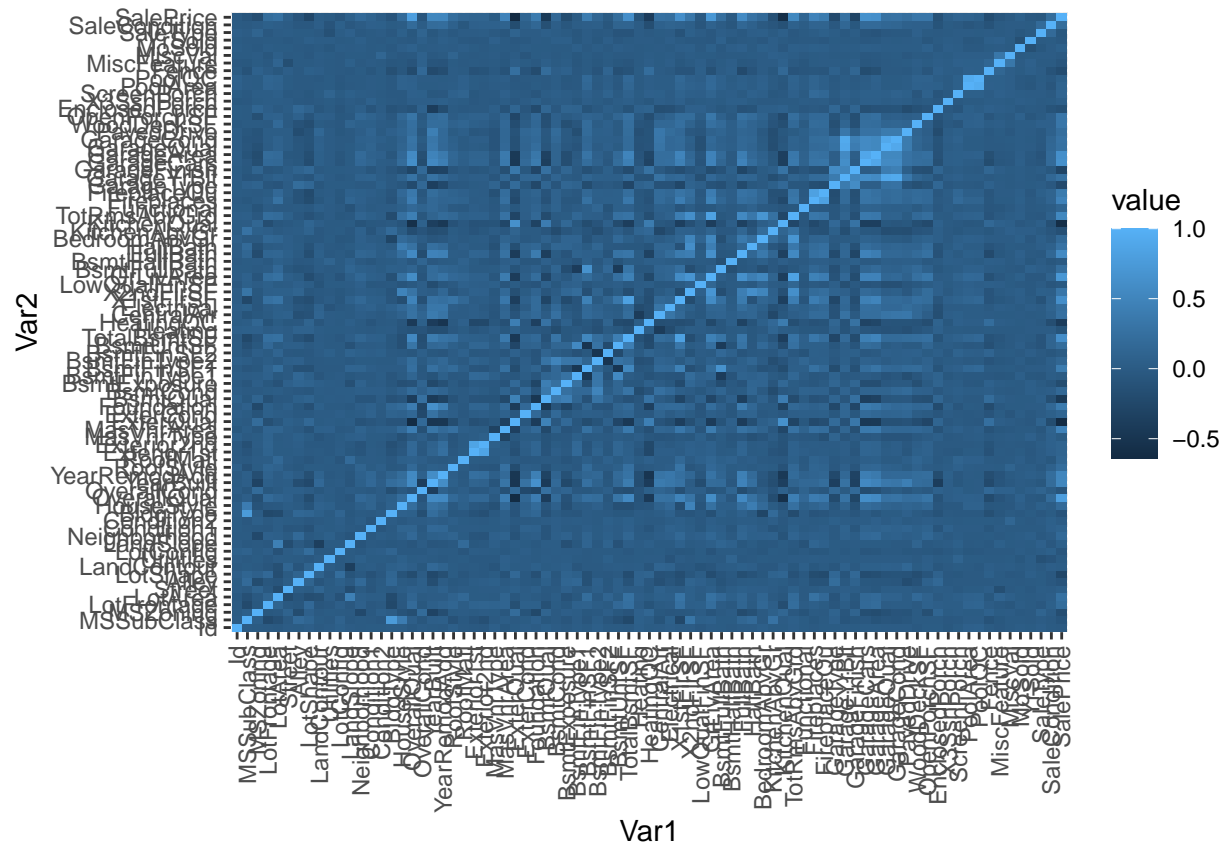
```
library(reshape2)
```

```
## Warning: package 'reshape2' was built under R version 4.2.3
```

```
red_cor <- na.omit(melt(corr_matrix))
```

```
#making a correlation matrix plot
```

```
ggplot(data = red_cor, aes(x=Var1, y=Var2, fill=value)) + geom_tile() + theme(axis.text.x = element_text(
```



```
red_cor
```

```
##      Var1      Var2 value
## 1      Id      Id 1.00
## 2 MSSubClass      Id 0.01
## 3 MSZoning      Id -0.01
## 4 LotFrontage      Id -0.02
## 5 LotArea      Id -0.03
## 6 Street      Id 0.01
## 7 Alley      Id 0.00
## 8 LotShape      Id 0.03
## 9 LandContour      Id -0.02
```


## 10	Utilities	Id 0.01
## 11	LotConfig	Id 0.05
## 12	LandSlope	Id 0.01
## 13	Neighborhood	Id -0.01
## 14	Condition1	Id 0.00
## 15	Condition2	Id 0.00
## 16	BldgType	Id 0.02
## 17	HouseStyle	Id 0.02
## 18	OverallQual	Id -0.03
## 19	OverallCond	Id 0.01
## 20	YearBuilt	Id -0.01
## 21	YearRemodAdd	Id -0.02
## 22	RoofStyle	Id 0.04
## 23	RoofMatl	Id -0.02
## 24	Exterior1st	Id -0.03
## 25	Exterior2nd	Id -0.04
## 26	MasVnrType	Id 0.04
## 27	MasVnrArea	Id -0.05
## 28	ExterQual	Id 0.00
## 29	ExterCond	Id 0.03
## 30	Foundation	Id 0.01
## 31	BsmtQual	Id 0.05
## 32	BsmtCond	Id 0.01
## 33	BsmtExposure	Id -0.02
## 34	BsmtFinType1	Id 0.02
## 35	BsmtFinSF1	Id -0.01
## 36	BsmtFinType2	Id 0.04
## 37	BsmtFinSF2	Id -0.01
## 38	BsmtUnfSF	Id -0.01
## 39	TotalBsmtSF	Id -0.02
## 40	Heating	Id 0.04
## 41	HeatingQC	Id 0.00
## 42	CentralAir	Id 0.01
## 43	Electrical	Id 0.03
## 44	X1stFlrSF	Id 0.01
## 45	X2ndFlrSF	Id 0.01
## 46	LowQualFinSF	Id -0.04
## 47	GrLivArea	Id 0.01
## 48	BsmtFullBath	Id 0.00
## 49	BsmtHalfBath	Id -0.02
## 50	FullBath	Id 0.01
## 51	HalfBath	Id 0.01
## 52	BedroomAbvGr	Id 0.04
## 53	KitchenAbvGr	Id 0.00
## 54	KitchenQual	Id 0.00
## 55	TotRmsAbvGrd	Id 0.03
## 56	Functional	Id 0.00
## 57	Fireplaces	Id -0.02
## 58	FireplaceQu	Id 0.00
## 59	GarageType	Id 0.00
## 60	GarageYrBlt	Id 0.01
## 61	GarageFinish	Id 0.00
## 62	GarageCars	Id 0.02
## 63	GarageArea	Id 0.02

## 64	GarageQual	Id	0.01
## 65	GarageCond	Id	0.01
## 66	PavedDrive	Id	0.01
## 67	WoodDeckSF	Id	-0.03
## 68	OpenPorchSF	Id	0.00
## 69	EnclosedPorch	Id	0.00
## 70	X3SsnPorch	Id	-0.05
## 71	ScreenPorch	Id	0.00
## 72	PoolArea	Id	0.06
## 73	PoolQC	Id	0.07
## 74	Fence	Id	-0.01
## 75	MiscFeature	Id	-0.04
## 76	MiscVal	Id	-0.01
## 77	MoSold	Id	0.02
## 78	YrSold	Id	0.00
## 79	SaleType	Id	0.03
## 80	SaleCondition	Id	-0.01
## 81	SalePrice	Id	-0.02
## 82	Id	MSSubClass	0.01
## 83	MSSubClass	MSSubClass	1.00
## 84	MSZoning	MSSubClass	0.04
## 85	LotFrontage	MSSubClass	-0.22
## 86	LotArea	MSSubClass	-0.14
## 87	Street	MSSubClass	-0.02
## 88	Alley	MSSubClass	0.18
## 89	LotShape	MSSubClass	0.12
## 90	LandContour	MSSubClass	0.00
## 91	Utilities	MSSubClass	-0.02
## 92	LotConfig	MSSubClass	0.08
## 93	LandSlope	MSSubClass	-0.03
## 94	Neighborhood	MSSubClass	-0.01
## 95	Condition1	MSSubClass	-0.02
## 96	Condition2	MSSubClass	-0.04
## 97	BldgType	MSSubClass	0.75
## 98	HouseStyle	MSSubClass	0.40
## 99	OverallQual	MSSubClass	0.03
## 100	OverallCond	MSSubClass	-0.06
## 101	YearBuilt	MSSubClass	0.03
## 102	YearRemodAdd	MSSubClass	0.04
## 103	RoofStyle	MSSubClass	-0.12
## 104	RoofMatl	MSSubClass	-0.03
## 105	Exterior1st	MSSubClass	-0.09
## 106	Exterior2nd	MSSubClass	-0.14
## 107	MasVnrType	MSSubClass	-0.02
## 108	MasVnrArea	MSSubClass	0.02
## 109	ExterQual	MSSubClass	-0.02
## 110	ExterCond	MSSubClass	0.00
## 111	Foundation	MSSubClass	0.06
## 112	BsmtQual	MSSubClass	-0.05
## 113	BsmtCond	MSSubClass	-0.02
## 114	BsmtExposure	MSSubClass	-0.07
## 115	BsmtFinType1	MSSubClass	0.01
## 116	BsmtFinSF1	MSSubClass	-0.07
## 117	BsmtFinType2	MSSubClass	0.02

## 118	BsmtFinSF2	MSSubClass	-0.07
## 119	BsmtUnfSF	MSSubClass	-0.14
## 120	TotalBsmtSF	MSSubClass	-0.24
## 121	Heating	MSSubClass	0.05
## 122	HeatingQC	MSSubClass	0.02
## 123	CentralAir	MSSubClass	-0.10
## 124	Electrical	MSSubClass	0.05
## 125	X1stFlrSF	MSSubClass	-0.25
## 126	X2ndFlrSF	MSSubClass	0.31
## 127	LowQualFinSF	MSSubClass	0.05
## 128	GrLivArea	MSSubClass	0.07
## 129	BsmtFullBath	MSSubClass	0.00
## 130	BsmtHalfBath	MSSubClass	0.00
## 131	FullBath	MSSubClass	0.13
## 132	HalfBath	MSSubClass	0.18
## 133	BedroomAbvGr	MSSubClass	-0.02
## 134	KitchenAbvGr	MSSubClass	0.28
## 135	KitchenQual	MSSubClass	0.01
## 136	TotRmsAbvGrd	MSSubClass	0.04
## 137	Functional	MSSubClass	0.00
## 138	Fireplaces	MSSubClass	-0.05
## 139	FireplaceQu	MSSubClass	-0.01
## 140	GarageType	MSSubClass	0.06
## 141	GarageYrBlt	MSSubClass	-0.08
## 142	GarageFinish	MSSubClass	-0.05
## 143	GarageCars	MSSubClass	-0.04
## 144	GarageArea	MSSubClass	-0.10
## 145	GarageQual	MSSubClass	-0.07
## 146	GarageCond	MSSubClass	-0.08
## 147	PavedDrive	MSSubClass	-0.06
## 148	WoodDeckSF	MSSubClass	-0.01
## 149	OpenPorchSF	MSSubClass	-0.01
## 150	EnclosedPorch	MSSubClass	-0.01
## 151	X3SsnPorch	MSSubClass	-0.04
## 152	ScreenPorch	MSSubClass	-0.03
## 153	PoolArea	MSSubClass	0.01
## 154	PoolQC	MSSubClass	0.01
## 155	Fence	MSSubClass	-0.11
## 156	MiscFeature	MSSubClass	-0.05
## 157	MiscVal	MSSubClass	-0.01
## 158	MoSold	MSSubClass	-0.01
## 159	YrSold	MSSubClass	-0.02
## 160	SaleType	MSSubClass	0.01
## 161	SaleCondition	MSSubClass	-0.02
## 162	SalePrice	MSSubClass	-0.08
## 163	Id	MSZoning	-0.01
## 164	MSSubClass	MSZoning	0.04
## 165	MSZoning	MSZoning	1.00
## 166	LotFrontage	MSZoning	-0.05
## 167	LotArea	MSZoning	-0.03
## 168	Street	MSZoning	0.09
## 169	Alley	MSZoning	-0.19
## 170	LotShape	MSZoning	0.06
## 171	LandContour	MSZoning	-0.02

## 172	Utilities	MSZoning	0.00
## 173	LotConfig	MSZoning	-0.01
## 174	LandSlope	MSZoning	-0.02
## 175	Neighborhood	MSZoning	-0.23
## 176	Condition1	MSZoning	-0.03
## 177	Condition2	MSZoning	0.04
## 178	BldgType	MSZoning	0.01
## 179	HouseStyle	MSZoning	-0.11
## 180	OverallQual	MSZoning	-0.16
## 181	OverallCond	MSZoning	0.19
## 182	YearBuilt	MSZoning	-0.31
## 183	YearRemodAdd	MSZoning	-0.17
## 184	RoofStyle	MSZoning	0.00
## 185	RoofMatl	MSZoning	0.01
## 186	Exterior1st	MSZoning	-0.01
## 187	Exterior2nd	MSZoning	0.01
## 188	MasVnrType	MSZoning	0.00
## 189	MasVnrArea	MSZoning	-0.06
## 190	ExterQual	MSZoning	0.20
## 191	ExterCond	MSZoning	-0.10
## 192	Foundation	MSZoning	-0.24
## 193	BsmtQual	MSZoning	0.10
## 194	BsmtCond	MSZoning	-0.02
## 195	BsmtExposure	MSZoning	0.03
## 196	BsmtFinType1	MSZoning	0.02
## 197	BsmtFinSF1	MSZoning	-0.05
## 198	BsmtFinType2	MSZoning	-0.03
## 199	BsmtFinSF2	MSZoning	0.03
## 200	BsmtUnfSF	MSZoning	-0.05
## 201	TotalBsmtSF	MSZoning	-0.09
## 202	Heating	MSZoning	0.06
## 203	HeatingQC	MSZoning	0.13
## 204	CentralAir	MSZoning	-0.05
## 205	Electrical	MSZoning	-0.07
## 206	X1stFlrSF	MSZoning	-0.06
## 207	X2ndFlrSF	MSZoning	-0.05
## 208	LowQualFinSF	MSZoning	0.01
## 209	GrLivArea	MSZoning	-0.08
## 210	BsmtFullBath	MSZoning	-0.02
## 211	BsmtHalfBath	MSZoning	0.01
## 212	FullBath	MSZoning	-0.20
## 213	HalfBath	MSZoning	-0.13
## 214	BedroomAbvGr	MSZoning	-0.02
## 215	KitchenAbvGr	MSZoning	0.05
## 216	KitchenQual	MSZoning	0.13
## 217	TotRmsAbvGrd	MSZoning	-0.04
## 218	Functional	MSZoning	-0.10
## 219	Fireplaces	MSZoning	-0.01
## 220	FireplaceQu	MSZoning	-0.02
## 221	GarageType	MSZoning	0.09
## 222	GarageYrBlt	MSZoning	-0.07
## 223	GarageFinish	MSZoning	0.10
## 224	GarageCars	MSZoning	-0.16
## 225	GarageArea	MSZoning	-0.19

## 226	GarageQual	MSZoning	-0.13
## 227	GarageCond	MSZoning	-0.09
## 228	PavedDrive	MSZoning	-0.10
## 229	WoodDeckSF	MSZoning	-0.01
## 230	OpenPorchSF	MSZoning	-0.15
## 231	EnclosedPorch	MSZoning	0.12
## 232	X3SsnPorch	MSZoning	0.00
## 233	ScreenPorch	MSZoning	0.02
## 234	PoolArea	MSZoning	0.00
## 235	PoolQC	MSZoning	0.00
## 236	Fence	MSZoning	0.07
## 237	MiscFeature	MSZoning	0.00
## 238	MiscVal	MSZoning	0.01
## 239	MoSold	MSZoning	-0.03
## 240	YrSold	MSZoning	-0.02
## 241	SaleType	MSZoning	0.10
## 242	SaleCondition	MSZoning	0.01
## 243	SalePrice	MSZoning	-0.17
## 244	Id	LotFrontage	-0.02
## 245	MSSubClass	LotFrontage	-0.22
## 246	MSZoning	LotFrontage	-0.05
## 247	LotFrontage	LotFrontage	1.00
## 248	LotArea	LotFrontage	0.10
## 249	Street	LotFrontage	-0.03
## 250	Alley	LotFrontage	-0.06
## 251	LotShape	LotFrontage	0.16
## 252	LandContour	LotFrontage	-0.07
## 253	Utilities	LotFrontage	-0.04
## 254	LotConfig	LotFrontage	0.03
## 255	LandSlope	LotFrontage	-0.04
## 256	Neighborhood	LotFrontage	0.06
## 257	Condition1	LotFrontage	-0.04
## 258	Condition2	LotFrontage	-0.02
## 259	BldgType	LotFrontage	-0.24
## 260	HouseStyle	LotFrontage	-0.04
## 261	OverallQual	LotFrontage	0.18
## 262	OverallCond	LotFrontage	-0.05
## 263	YearBuilt	LotFrontage	0.04
## 264	YearRemodAdd	LotFrontage	0.08
## 265	RoofStyle	LotFrontage	0.12
## 266	RoofMatl	LotFrontage	0.02
## 267	Exterior1st	LotFrontage	0.09
## 268	Exterior2nd	LotFrontage	0.10
## 269	MasVnrType	LotFrontage	0.09
## 270	MasVnrArea	LotFrontage	0.11
## 271	ExterQual	LotFrontage	-0.15
## 272	ExterCond	LotFrontage	0.05
## 273	Foundation	LotFrontage	0.05
## 274	BsmtQual	LotFrontage	-0.13
## 275	BsmtCond	LotFrontage	0.00
## 276	BsmtExposure	LotFrontage	-0.05
## 277	BsmtFinType1	LotFrontage	0.07
## 278	BsmtFinSF1	LotFrontage	0.08
## 279	BsmtFinType2	LotFrontage	0.02

## 280	BsmtFinSF2	LotFrontage	-0.01
## 281	BsmtUnfSF	LotFrontage	0.16
## 282	TotalBsmtSF	LotFrontage	0.24
## 283	Heating	LotFrontage	0.01
## 284	HeatingQC	LotFrontage	-0.10
## 285	CentralAir	LotFrontage	-0.01
## 286	Electrical	LotFrontage	0.01
## 287	X1stFlrSF	LotFrontage	0.25
## 288	X2ndFlrSF	LotFrontage	0.04
## 289	LowQualFinSF	LotFrontage	0.05
## 290	GrLivArea	LotFrontage	0.22
## 291	BsmtFullBath	LotFrontage	0.01
## 292	BsmtHalfBath	LotFrontage	-0.03
## 293	FullBath	LotFrontage	0.12
## 294	HalfBath	LotFrontage	-0.01
## 295	BedroomAbvGr	LotFrontage	0.14
## 296	KitchenAbvGr	LotFrontage	0.03
## 297	KitchenQual	LotFrontage	-0.17
## 298	TotRmsAbvGrd	LotFrontage	0.22
## 299	Functional	LotFrontage	0.01
## 300	Fireplaces	LotFrontage	0.04
## 301	FireplaceQu	LotFrontage	0.00
## 302	GarageType	LotFrontage	-0.07
## 303	GarageYrBlt	LotFrontage	0.02
## 304	GarageFinish	LotFrontage	-0.07
## 305	GarageCars	LotFrontage	0.17
## 306	GarageArea	LotFrontage	0.20
## 307	GarageQual	LotFrontage	0.01
## 308	GarageCond	LotFrontage	0.02
## 309	PavedDrive	LotFrontage	0.02
## 310	WoodDeckSF	LotFrontage	-0.02
## 311	OpenPorchSF	LotFrontage	0.07
## 312	EnclosedPorch	LotFrontage	0.03
## 313	X3SsnPorch	LotFrontage	0.02
## 314	ScreenPorch	LotFrontage	0.02
## 315	PoolArea	LotFrontage	0.11
## 316	PoolQC	LotFrontage	0.12
## 317	Fence	LotFrontage	0.01
## 318	MiscFeature	LotFrontage	-0.03
## 319	MiscVal	LotFrontage	-0.06
## 320	MoSold	LotFrontage	0.02
## 321	YrSold	LotFrontage	-0.01
## 322	SaleType	LotFrontage	-0.04
## 323	SaleCondition	LotFrontage	0.05
## 324	SalePrice	LotFrontage	0.21
## 325	Id	LotArea	-0.03
## 326	MSSubClass	LotArea	-0.14
## 327	MSZoning	LotArea	-0.03
## 328	LotFrontage	LotArea	0.10
## 329	LotArea	LotArea	1.00
## 330	Street	LotArea	-0.20
## 331	Alley	LotArea	-0.08
## 332	LotShape	LotArea	-0.17
## 333	LandContour	LotArea	-0.15

## 334	Utilities	LotArea	0.01
## 335	LotConfig	LotArea	-0.12
## 336	LandSlope	LotArea	0.44
## 337	Neighborhood	LotArea	0.04
## 338	Condition1	LotArea	0.02
## 339	Condition2	LotArea	0.02
## 340	BldgType	LotArea	-0.21
## 341	HouseStyle	LotArea	-0.03
## 342	OverallQual	LotArea	0.11
## 343	OverallCond	LotArea	-0.01
## 344	YearBuilt	LotArea	0.01
## 345	YearRemodAdd	LotArea	0.01
## 346	RoofStyle	LotArea	0.08
## 347	RoofMatl	LotArea	0.15
## 348	Exterior1st	LotArea	0.00
## 349	Exterior2nd	LotArea	0.00
## 350	MasVnrType	LotArea	-0.01
## 351	MasVnrArea	LotArea	0.10
## 352	ExterQual	LotArea	-0.06
## 353	ExterCond	LotArea	0.02
## 354	Foundation	LotArea	-0.01
## 355	BsmtQual	LotArea	-0.04
## 356	BsmtCond	LotArea	0.02
## 357	BsmtExposure	LotArea	-0.12
## 358	BsmtFinType1	LotArea	-0.05
## 359	BsmtFinSF1	LotArea	0.21
## 360	BsmtFinType2	LotArea	-0.03
## 361	BsmtFinSF2	LotArea	0.11
## 362	BsmtUnfSF	LotArea	0.00
## 363	TotalBsmtSF	LotArea	0.26
## 364	Heating	LotArea	0.03
## 365	HeatingQC	LotArea	0.00
## 366	CentralAir	LotArea	0.05
## 367	Electrical	LotArea	0.04
## 368	X1stFlrSF	LotArea	0.30
## 369	X2ndFlrSF	LotArea	0.05
## 370	LowQualFinSF	LotArea	0.00
## 371	GrLivArea	LotArea	0.26
## 372	BsmtFullBath	LotArea	0.16
## 373	BsmtHalfBath	LotArea	0.05
## 374	FullBath	LotArea	0.13
## 375	HalfBath	LotArea	0.01
## 376	BedroomAbvGr	LotArea	0.12
## 377	KitchenAbvGr	LotArea	-0.02
## 378	KitchenQual	LotArea	-0.06
## 379	TotRmsAbvGrd	LotArea	0.19
## 380	Functional	LotArea	-0.02
## 381	Fireplaces	LotArea	0.27
## 382	FireplaceQu	LotArea	0.16
## 383	GarageType	LotArea	-0.09
## 384	GarageYrBlt	LotArea	0.07
## 385	GarageFinish	LotArea	-0.05
## 386	GarageCars	LotArea	0.15
## 387	GarageArea	LotArea	0.18

## 388	GarageQual	LotArea	0.08
## 389	GarageCond	LotArea	0.08
## 390	PavedDrive	LotArea	0.02
## 391	WoodDeckSF	LotArea	0.17
## 392	OpenPorchSF	LotArea	0.08
## 393	EnclosedPorch	LotArea	-0.02
## 394	X3SsnPorch	LotArea	0.02
## 395	ScreenPorch	LotArea	0.04
## 396	PoolArea	LotArea	0.08
## 397	PoolQC	LotArea	0.09
## 398	Fence	LotArea	-0.05
## 399	MiscFeature	LotArea	0.11
## 400	MiscVal	LotArea	0.04
## 401	MoSold	LotArea	0.00
## 402	YrSold	LotArea	-0.01
## 403	SaleType	LotArea	0.01
## 404	SaleCondition	LotArea	0.03
## 405	SalePrice	LotArea	0.26
## 406	Id	Street	0.01
## 407	MSSubClass	Street	-0.02
## 408	MSZoning	Street	0.09
## 409	LotFrontage	Street	-0.03
## 410	LotArea	Street	-0.20
## 411	Street	Street	1.00
## 412	Alley	Street	0.02
## 413	LotShape	Street	-0.01
## 414	LandContour	Street	0.12
## 415	Utilities	Street	0.00
## 416	LotConfig	Street	0.01
## 417	LandSlope	Street	-0.18
## 418	Neighborhood	Street	-0.01
## 419	Condition1	Street	-0.07
## 420	Condition2	Street	0.00
## 421	BldgType	Street	-0.02
## 422	HouseStyle	Street	0.02
## 423	OverallQual	Street	0.06
## 424	OverallCond	Street	0.04
## 425	YearBuilt	Street	0.02
## 426	YearRemodAdd	Street	0.07
## 427	RoofStyle	Street	-0.02
## 428	RoofMatl	Street	0.01
## 429	Exterior1st	Street	0.00
## 430	Exterior2nd	Street	0.01
## 431	MasVnrType	Street	0.01
## 432	MasVnrArea	Street	0.02
## 433	ExterQual	Street	0.05
## 434	ExterCond	Street	0.01
## 435	Foundation	Street	0.04
## 436	BsmtQual	Street	-0.03
## 437	BsmtCond	Street	-0.02
## 438	BsmtExposure	Street	0.06
## 439	BsmtFinType1	Street	-0.02
## 440	BsmtFinSF1	Street	-0.02
## 441	BsmtFinType2	Street	0.04

## 442	BsmtFinSF2	Street	-0.04
## 443	BsmtUnfSF	Street	0.04
## 444	TotalBsmtSF	Street	0.01
## 445	Heating	Street	0.01
## 446	HeatingQC	Street	-0.05
## 447	CentralAir	Street	0.07
## 448	Electrical	Street	0.02
## 449	X1stFlrSF	Street	0.01
## 450	X2ndFlrSF	Street	0.05
## 451	LowQualFinSF	Street	0.01
## 452	GrLivArea	Street	0.04
## 453	BsmtFullBath	Street	-0.05
## 454	BsmtHalfBath	Street	0.02
## 455	FullBath	Street	0.05
## 456	HalfBath	Street	0.03
## 457	BedroomAbvGr	Street	0.03
## 458	KitchenAbvGr	Street	0.01
## 459	KitchenQual	Street	-0.03
## 460	TotRmsAbvGrd	Street	0.05
## 461	Functional	Street	-0.02
## 462	Fireplaces	Street	-0.01
## 463	FireplaceQu	Street	0.02
## 464	GarageType	Street	0.01
## 465	GarageYrBlt	Street	0.03
## 466	GarageFinish	Street	0.02
## 467	GarageCars	Street	-0.02
## 468	GarageArea	Street	-0.05
## 469	GarageQual	Street	0.02
## 470	GarageCond	Street	0.02
## 471	PavedDrive	Street	0.02
## 472	WoodDeckSF	Street	-0.02
## 473	OpenPorchSF	Street	-0.01
## 474	EnclosedPorch	Street	0.02
## 475	X3SsnPorch	Street	0.01
## 476	ScreenPorch	Street	-0.03
## 477	PoolArea	Street	0.00
## 478	PoolQC	Street	0.00
## 479	Fence	Street	0.03
## 480	MiscFeature	Street	-0.16
## 481	MiscVal	Street	-0.02
## 482	MoSold	Street	0.00
## 483	YrSold	Street	-0.03
## 484	SaleType	Street	0.02
## 485	SaleCondition	Street	0.01
## 486	SalePrice	Street	0.04
## 487	Id	Alley	0.00
## 488	MSSubClass	Alley	0.18
## 489	MSZoning	Alley	-0.19
## 490	LotFrontage	Alley	-0.06
## 491	LotArea	Alley	-0.08
## 492	Street	Alley	0.02
## 493	Alley	Alley	1.00
## 494	LotShape	Alley	0.10
## 495	LandContour	Alley	-0.08

## 496	Utilities	Alley -0.01
## 497	LotConfig	Alley 0.05
## 498	LandSlope	Alley -0.02
## 499	Neighborhood	Alley 0.17
## 500	Condition1	Alley -0.06
## 501	Condition2	Alley -0.01
## 502	BldgType	Alley 0.14
## 503	HouseStyle	Alley -0.01
## 504	OverallQual	Alley -0.03
## 505	OverallCond	Alley 0.04
## 506	YearBuilt	Alley -0.17
## 507	YearRemodAdd	Alley 0.01
## 508	RoofStyle	Alley -0.05
## 509	RoofMatl	Alley -0.03
## 510	Exterior1st	Alley 0.02
## 511	Exterior2nd	Alley 0.03
## 512	MasVnrType	Alley 0.05
## 513	MasVnrArea	Alley -0.02
## 514	ExterQual	Alley 0.02
## 515	ExterCond	Alley -0.03
## 516	Foundation	Alley -0.05
## 517	BsmtQual	Alley 0.05
## 518	BsmtCond	Alley -0.04
## 519	BsmtExposure	Alley 0.12
## 520	BsmtFinType1	Alley 0.14
## 521	BsmtFinSF1	Alley -0.13
## 522	BsmtFinType2	Alley 0.06
## 523	BsmtFinSF2	Alley -0.05
## 524	BsmtUnfSF	Alley 0.04
## 525	TotalBsmtSF	Alley -0.11
## 526	Heating	Alley 0.08
## 527	HeatingQC	Alley -0.04
## 528	CentralAir	Alley -0.14
## 529	Electrical	Alley -0.07
## 530	X1stFlrSF	Alley -0.13
## 531	X2ndFlrSF	Alley 0.10
## 532	LowQualFinSF	Alley 0.06
## 533	GrLivArea	Alley 0.00
## 534	BsmtFullBath	Alley -0.10
## 535	BsmtHalfBath	Alley -0.04
## 536	FullBath	Alley -0.01
## 537	HalfBath	Alley 0.00
## 538	BedroomAbvGr	Alley -0.01
## 539	KitchenAbvGr	Alley 0.02
## 540	KitchenQual	Alley 0.00
## 541	TotRmsAbvGrd	Alley -0.04
## 542	Functional	Alley -0.01
## 543	Fireplaces	Alley -0.11
## 544	FireplaceQu	Alley -0.11
## 545	GarageType	Alley 0.21
## 546	GarageYrBlt	Alley -0.03
## 547	GarageFinish	Alley 0.09
## 548	GarageCars	Alley -0.05
## 549	GarageArea	Alley -0.06

## 550	GarageQual	Alley	-0.06
## 551	GarageCond	Alley	-0.07
## 552	PavedDrive	Alley	-0.18
## 553	WoodDeckSF	Alley	-0.12
## 554	OpenPorchSF	Alley	0.07
## 555	EnclosedPorch	Alley	0.15
## 556	X3SsnPorch	Alley	-0.03
## 557	ScreenPorch	Alley	-0.02
## 558	PoolArea	Alley	-0.02
## 559	PoolQC	Alley	-0.02
## 560	Fence	Alley	-0.02
## 561	MiscFeature	Alley	-0.01
## 562	MiscVal	Alley	-0.01
## 563	MoSold	Alley	-0.02
## 564	YrSold	Alley	-0.01
## 565	SaleType	Alley	0.00
## 566	SaleCondition	Alley	-0.04
## 567	SalePrice	Alley	-0.09
## 568	Id	LotShape	0.03
## 569	MSSubClass	LotShape	0.12
## 570	MSZoning	LotShape	0.06
## 571	LotFrontage	LotShape	0.16
## 572	LotArea	LotShape	-0.17
## 573	Street	LotShape	-0.01
## 574	Alley	LotShape	0.10
## 575	LotShape	LotShape	1.00
## 576	LandContour	LotShape	0.09
## 577	Utilities	LotShape	-0.04
## 578	LotConfig	LotShape	0.22
## 579	LandSlope	LotShape	-0.10
## 580	Neighborhood	LotShape	-0.03
## 581	Condition1	LotShape	-0.12
## 582	Condition2	LotShape	-0.04
## 583	BldgType	LotShape	0.12
## 584	HouseStyle	LotShape	-0.10
## 585	OverallQual	LotShape	-0.19
## 586	OverallCond	LotShape	0.01
## 587	YearBuilt	LotShape	-0.23
## 588	YearRemodAdd	LotShape	-0.15
## 589	RoofStyle	LotShape	0.00
## 590	RoofMatl	LotShape	-0.07
## 591	Exterior1st	LotShape	-0.02
## 592	Exterior2nd	LotShape	-0.03
## 593	MasVnrType	LotShape	0.00
## 594	MasVnrArea	LotShape	-0.11
## 595	ExterQual	LotShape	0.15
## 596	ExterCond	LotShape	-0.03
## 597	Foundation	LotShape	-0.14
## 598	BsmtQual	LotShape	0.09
## 599	BsmtCond	LotShape	-0.06
## 600	BsmtExposure	LotShape	0.09
## 601	BsmtFinType1	LotShape	0.05
## 602	BsmtFinSF1	LotShape	-0.13
## 603	BsmtFinType2	LotShape	-0.03

## 604	BsmtFinSF2	LotShape	-0.04
## 605	BsmtUnfSF	LotShape	-0.02
## 606	TotalBsmtSF	LotShape	-0.18
## 607	Heating	LotShape	0.08
## 608	HeatingQC	LotShape	0.10
## 609	CentralAir	LotShape	-0.12
## 610	Electrical	LotShape	-0.10
## 611	X1stFlrSF	LotShape	-0.17
## 612	X2ndFlrSF	LotShape	-0.06
## 613	LowQualFinSF	LotShape	0.02
## 614	GrLivArea	LotShape	-0.18
## 615	BsmtFullBath	LotShape	-0.08
## 616	BsmtHalfBath	LotShape	-0.03
## 617	FullBath	LotShape	-0.16
## 618	HalfBath	LotShape	-0.11
## 619	BedroomAbvGr	LotShape	-0.05
## 620	KitchenAbvGr	LotShape	0.09
## 621	KitchenQual	LotShape	0.12
## 622	TotRmsAbvGrd	LotShape	-0.12
## 623	Functional	LotShape	-0.03
## 624	Fireplaces	LotShape	-0.19
## 625	FireplaceQu	LotShape	-0.21
## 626	GarageType	LotShape	0.14
## 627	GarageYrBlt	LotShape	-0.08
## 628	GarageFinish	LotShape	0.15
## 629	GarageCars	LotShape	-0.18
## 630	GarageArea	LotShape	-0.16
## 631	GarageQual	LotShape	-0.11
## 632	GarageCond	LotShape	-0.10
## 633	PavedDrive	LotShape	-0.11
## 634	WoodDeckSF	LotShape	-0.17
## 635	OpenPorchSF	LotShape	-0.08
## 636	EnclosedPorch	LotShape	0.08
## 637	X3SsnPorch	LotShape	-0.04
## 638	ScreenPorch	LotShape	-0.05
## 639	PoolArea	LotShape	-0.02
## 640	PoolQC	LotShape	-0.02
## 641	Fence	LotShape	0.05
## 642	MiscFeature	LotShape	-0.01
## 643	MiscVal	LotShape	-0.04
## 644	MoSold	LotShape	-0.03
## 645	YrSold	LotShape	0.04
## 646	SaleType	LotShape	0.00
## 647	SaleCondition	LotShape	-0.04
## 648	SalePrice	LotShape	-0.26
## 649	Id	LandContour	-0.02
## 650	MSSubClass	LandContour	0.00
## 651	MSZoning	LandContour	-0.02
## 652	LotFrontage	LandContour	-0.07
## 653	LotArea	LandContour	-0.15
## 654	Street	LandContour	0.12
## 655	Alley	LandContour	-0.08
## 656	LotShape	LandContour	0.09
## 657	LandContour	LandContour	1.00

## 658	Utilities	LandContour	0.01
## 659	LotConfig	LandContour	-0.03
## 660	LandSlope	LandContour	-0.37
## 661	Neighborhood	LandContour	0.00
## 662	Condition1	LandContour	0.02
## 663	Condition2	LandContour	-0.02
## 664	BldgType	LandContour	0.05
## 665	HouseStyle	LandContour	0.08
## 666	OverallQual	LandContour	0.03
## 667	OverallCond	LandContour	-0.05
## 668	YearBuilt	LandContour	0.16
## 669	YearRemodAdd	LandContour	0.09
## 670	RoofStyle	LandContour	0.00
## 671	RoofMatl	LandContour	-0.02
## 672	Exterior1st	LandContour	-0.01
## 673	Exterior2nd	LandContour	-0.03
## 674	MasVnrType	LandContour	-0.08
## 675	MasVnrArea	LandContour	0.05
## 676	ExterQual	LandContour	0.00
## 677	ExterCond	LandContour	0.01
## 678	Foundation	LandContour	0.05
## 679	BsmtQual	LandContour	0.00
## 680	BsmtCond	LandContour	0.02
## 681	BsmtExposure	LandContour	0.04
## 682	BsmtFinType1	LandContour	-0.07
## 683	BsmtFinSF1	LandContour	-0.02
## 684	BsmtFinType2	LandContour	-0.02
## 685	BsmtFinSF2	LandContour	0.01
## 686	BsmtUnfSF	LandContour	0.02
## 687	TotalBsmtSF	LandContour	0.01
## 688	Heating	LandContour	0.02
## 689	HeatingQC	LandContour	-0.07
## 690	CentralAir	LandContour	0.11
## 691	Electrical	LandContour	0.08
## 692	X1stFlrSF	LandContour	-0.04
## 693	X2ndFlrSF	LandContour	-0.03
## 694	LowQualFinSF	LandContour	-0.10
## 695	GrLivArea	LandContour	-0.07
## 696	BsmtFullBath	LandContour	0.01
## 697	BsmtHalfBath	LandContour	0.02
## 698	FullBath	LandContour	0.05
## 699	HalfBath	LandContour	0.03
## 700	BedroomAbvGr	LandContour	-0.04
## 701	KitchenAbvGr	LandContour	-0.04
## 702	KitchenQual	LandContour	0.03
## 703	TotRmsAbvGrd	LandContour	-0.05
## 704	Functional	LandContour	0.04
## 705	Fireplaces	LandContour	-0.05
## 706	FireplaceQu	LandContour	-0.01
## 707	GarageType	LandContour	-0.06
## 708	GarageYrBlt	LandContour	0.07
## 709	GarageFinish	LandContour	-0.02
## 710	GarageCars	LandContour	0.05
## 711	GarageArea	LandContour	0.05

## 712	GarageQual	LandContour	0.07
## 713	GarageCond	LandContour	0.06
## 714	PavedDrive	LandContour	0.14
## 715	WoodDeckSF	LandContour	0.00
## 716	OpenPorchSF	LandContour	0.04
## 717	EnclosedPorch	LandContour	-0.06
## 718	X3SsnPorch	LandContour	-0.02
## 719	ScreenPorch	LandContour	0.00
## 720	PoolArea	LandContour	-0.01
## 721	PoolQC	LandContour	-0.03
## 722	Fence	LandContour	0.03
## 723	MiscFeature	LandContour	0.01
## 724	MiscVal	LandContour	0.02
## 725	MoSold	LandContour	-0.01
## 726	YrSold	LandContour	0.02
## 727	SaleType	LandContour	-0.02
## 728	SaleCondition	LandContour	0.03
## 729	SalePrice	LandContour	0.02
## 730	Id	Utilities	0.01
## 731	MSSubClass	Utilities	-0.02
## 732	MSZoning	Utilities	0.00
## 733	LotFrontage	Utilities	-0.04
## 734	LotArea	Utilities	0.01
## 735	Street	Utilities	0.00
## 736	Alley	Utilities	-0.01
## 737	LotShape	Utilities	-0.04
## 738	LandContour	Utilities	0.01
## 739	Utilities	Utilities	1.00
## 740	LotConfig	Utilities	-0.03
## 741	LandSlope	Utilities	-0.01
## 742	Neighborhood	Utilities	0.05
## 743	Condition1	Utilities	0.00
## 744	Condition2	Utilities	0.00
## 745	BldgType	Utilities	-0.01
## 746	HouseStyle	Utilities	0.05
## 747	OverallQual	Utilities	0.00
## 748	OverallCond	Utilities	0.01
## 749	YearBuilt	Utilities	-0.01
## 750	YearRemodAdd	Utilities	-0.03
## 751	RoofStyle	Utilities	-0.01
## 752	RoofMatl	Utilities	0.00
## 753	Exterior1st	Utilities	-0.03
## 754	Exterior2nd	Utilities	-0.03
## 755	MasVnrType	Utilities	-0.03
## 756	MasVnrArea	Utilities	0.06
## 757	ExterQual	Utilities	0.02
## 758	ExterCond	Utilities	0.01
## 759	Foundation	Utilities	-0.01
## 760	BsmtQual	Utilities	0.02
## 761	BsmtCond	Utilities	0.01
## 762	BsmtExposure	Utilities	0.02
## 763	BsmtFinType1	Utilities	-0.01
## 764	BsmtFinSF1	Utilities	-0.02
## 765	BsmtFinType2	Utilities	-0.01

## 766	BsmtFinSF2	Utilities	0.05
## 767	BsmtUnfSF	Utilities	-0.01
## 768	TotalBsmtSF	Utilities	-0.01
## 769	Heating	Utilities	0.00
## 770	HeatingQC	Utilities	0.01
## 771	CentralAir	Utilities	0.01
## 772	Electrical	Utilities	-0.09
## 773	X1stFlrSF	Utilities	0.01
## 774	X2ndFlrSF	Utilities	-0.02
## 775	LowQualFinSF	Utilities	0.00
## 776	GrLivArea	Utilities	-0.01
## 777	BsmtFullBath	Utilities	-0.02
## 778	BsmtHalfBath	Utilities	0.10
## 779	FullBath	Utilities	-0.03
## 780	HalfBath	Utilities	-0.02
## 781	BedroomAbvGr	Utilities	0.00
## 782	KitchenAbvGr	Utilities	-0.01
## 783	KitchenQual	Utilities	-0.01
## 784	TotRmsAbvGrd	Utilities	0.01
## 785	Functional	Utilities	0.01
## 786	Fireplaces	Utilities	0.02
## 787	FireplaceQu	Utilities	0.01
## 788	GarageType	Utilities	0.00
## 789	GarageYrBlt	Utilities	0.01
## 790	GarageFinish	Utilities	0.00
## 791	GarageCars	Utilities	0.01
## 792	GarageArea	Utilities	0.01
## 793	GarageQual	Utilities	0.01
## 794	GarageCond	Utilities	0.01
## 795	PavedDrive	Utilities	0.01
## 796	WoodDeckSF	Utilities	-0.02
## 797	OpenPorchSF	Utilities	0.03
## 798	EnclosedPorch	Utilities	-0.01
## 799	X3SsnPorch	Utilities	0.00
## 800	ScreenPorch	Utilities	0.10
## 801	PoolArea	Utilities	0.00
## 802	PoolQC	Utilities	0.00
## 803	Fence	Utilities	-0.01
## 804	MiscFeature	Utilities	-0.01
## 805	MiscVal	Utilities	0.00
## 806	MoSold	Utilities	-0.05
## 807	YrSold	Utilities	0.02
## 808	SaleType	Utilities	-0.13
## 809	SaleCondition	Utilities	-0.09
## 810	SalePrice	Utilities	-0.01
## 811	Id	LotConfig	0.05
## 812	MSSubClass	LotConfig	0.08
## 813	MSZoning	LotConfig	-0.01
## 814	LotFrontage	LotConfig	0.03
## 815	LotArea	LotConfig	-0.12
## 816	Street	LotConfig	0.01
## 817	Alley	LotConfig	0.05
## 818	LotShape	LotConfig	0.22
## 819	LandContour	LotConfig	-0.03

## 820	Utilities	LotConfig	-0.03
## 821	LotConfig	LotConfig	1.00
## 822	LandSlope	LotConfig	-0.01
## 823	Neighborhood	LotConfig	-0.03
## 824	Condition1	LotConfig	0.02
## 825	Condition2	LotConfig	0.03
## 826	BldgType	LotConfig	0.11
## 827	HouseStyle	LotConfig	-0.03
## 828	OverallQual	LotConfig	-0.03
## 829	OverallCond	LotConfig	-0.03
## 830	YearBuilt	LotConfig	0.01
## 831	YearRemodAdd	LotConfig	-0.01
## 832	RoofStyle	LotConfig	-0.01
## 833	RoofMatl	LotConfig	-0.07
## 834	Exterior1st	LotConfig	0.02
## 835	Exterior2nd	LotConfig	0.01
## 836	MasVnrType	LotConfig	0.00
## 837	MasVnrArea	LotConfig	-0.03
## 838	ExterQual	LotConfig	0.00
## 839	ExterCond	LotConfig	0.03
## 840	Foundation	LotConfig	-0.01
## 841	BsmtQual	LotConfig	0.01
## 842	BsmtCond	LotConfig	0.02
## 843	BsmtExposure	LotConfig	0.01
## 844	BsmtFinType1	LotConfig	0.01
## 845	BsmtFinSF1	LotConfig	-0.02
## 846	BsmtFinType2	LotConfig	-0.01
## 847	BsmtFinSF2	LotConfig	-0.01
## 848	BsmtUnfSF	LotConfig	-0.01
## 849	TotalBsmtSF	LotConfig	-0.04
## 850	Heating	LotConfig	0.00
## 851	HeatingQC	LotConfig	-0.01
## 852	CentralAir	LotConfig	0.00
## 853	Electrical	LotConfig	-0.03
## 854	X1stFlrSF	LotConfig	-0.06
## 855	X2ndFlrSF	LotConfig	-0.05
## 856	LowQualFinSF	LotConfig	0.00
## 857	GrLivArea	LotConfig	-0.09
## 858	BsmtFullBath	LotConfig	-0.01
## 859	BsmtHalfBath	LotConfig	-0.01
## 860	FullBath	LotConfig	-0.01
## 861	HalfBath	LotConfig	-0.03
## 862	BedroomAbvGr	LotConfig	-0.06
## 863	KitchenAbvGr	LotConfig	0.00
## 864	KitchenQual	LotConfig	-0.01
## 865	TotRmsAbvGrd	LotConfig	-0.05
## 866	Functional	LotConfig	-0.02
## 867	Fireplaces	LotConfig	-0.06
## 868	FireplaceQu	LotConfig	-0.05
## 869	GarageType	LotConfig	0.00
## 870	GarageYrBlt	LotConfig	-0.03
## 871	GarageFinish	LotConfig	0.00
## 872	GarageCars	LotConfig	-0.07
## 873	GarageArea	LotConfig	-0.06

## 874	GarageQual	LotConfig	-0.02
## 875	GarageCond	LotConfig	-0.02
## 876	PavedDrive	LotConfig	-0.05
## 877	WoodDeckSF	LotConfig	-0.04
## 878	OpenPorchSF	LotConfig	-0.05
## 879	EnclosedPorch	LotConfig	-0.07
## 880	X3SsnPorch	LotConfig	-0.03
## 881	ScreenPorch	LotConfig	0.00
## 882	PoolArea	LotConfig	-0.05
## 883	PoolQC	LotConfig	-0.04
## 884	Fence	LotConfig	-0.02
## 885	MiscFeature	LotConfig	-0.02
## 886	MiscVal	LotConfig	-0.02
## 887	MoSold	LotConfig	0.02
## 888	YrSold	LotConfig	-0.01
## 889	SaleType	LotConfig	0.02
## 890	SaleCondition	LotConfig	0.05
## 891	SalePrice	LotConfig	-0.07
## 892	Id	LandSlope	0.01
## 893	MSSubClass	LandSlope	-0.03
## 894	MSZoning	LandSlope	-0.02
## 895	LotFrontage	LandSlope	-0.04
## 896	LotArea	LandSlope	0.44
## 897	Street	LandSlope	-0.18
## 898	Alley	LandSlope	-0.02
## 899	LotShape	LandSlope	-0.10
## 900	LandContour	LandSlope	-0.37
## 901	Utilities	LandSlope	-0.01
## 902	LotConfig	LandSlope	-0.01
## 903	LandSlope	LandSlope	1.00
## 904	Neighborhood	LandSlope	-0.08
## 905	Condition1	LandSlope	-0.02
## 906	Condition2	LandSlope	-0.03
## 907	BldgType	LandSlope	-0.05
## 908	HouseStyle	LandSlope	-0.03
## 909	OverallQual	LandSlope	-0.07
## 910	OverallCond	LandSlope	0.01
## 911	YearBuilt	LandSlope	-0.07
## 912	YearRemodAdd	LandSlope	-0.06
## 913	RoofStyle	LandSlope	-0.03
## 914	RoofMatl	LandSlope	0.18
## 915	Exterior1st	LandSlope	-0.05
## 916	Exterior2nd	LandSlope	-0.03
## 917	MasVnrType	LandSlope	0.04
## 918	MasVnrArea	LandSlope	-0.02
## 919	ExterQual	LandSlope	0.02
## 920	ExterCond	LandSlope	0.00
## 921	Foundation	LandSlope	-0.03
## 922	BsmtQual	LandSlope	0.02
## 923	BsmtCond	LandSlope	0.02
## 924	BsmtExposure	LandSlope	-0.14
## 925	BsmtFinType1	LandSlope	-0.05
## 926	BsmtFinSF1	LandSlope	0.11
## 927	BsmtFinType2	LandSlope	-0.03

## 928	BsmtFinSF2	LandSlope	0.09
## 929	BsmtUnfSF	LandSlope	-0.12
## 930	TotalBsmtSF	LandSlope	0.03
## 931	Heating	LandSlope	0.01
## 932	HeatingQC	LandSlope	0.04
## 933	CentralAir	LandSlope	-0.01
## 934	Electrical	LandSlope	-0.01
## 935	X1stFlrSF	LandSlope	0.07
## 936	X2ndFlrSF	LandSlope	-0.01
## 937	LowQualFinSF	LandSlope	0.01
## 938	GrLivArea	LandSlope	0.04
## 939	BsmtFullBath	LandSlope	0.12
## 940	BsmtHalfBath	LandSlope	0.07
## 941	FullBath	LandSlope	-0.05
## 942	HalfBath	LandSlope	0.00
## 943	BedroomAbvGr	LandSlope	-0.05
## 944	KitchenAbvGr	LandSlope	-0.04
## 945	KitchenQual	LandSlope	0.00
## 946	TotRmsAbvGrd	LandSlope	-0.03
## 947	Functional	LandSlope	-0.11
## 948	Fireplaces	LandSlope	0.12
## 949	FireplaceQu	LandSlope	0.07
## 950	GarageType	LandSlope	0.00
## 951	GarageYrBlt	LandSlope	-0.01
## 952	GarageFinish	LandSlope	0.01
## 953	GarageCars	LandSlope	0.00
## 954	GarageArea	LandSlope	0.00
## 955	GarageQual	LandSlope	0.00
## 956	GarageCond	LandSlope	-0.02
## 957	PavedDrive	LandSlope	-0.02
## 958	WoodDeckSF	LandSlope	0.10
## 959	OpenPorchSF	LandSlope	-0.03
## 960	EnclosedPorch	LandSlope	-0.01
## 961	X3SsnPorch	LandSlope	0.01
## 962	ScreenPorch	LandSlope	0.05
## 963	PoolArea	LandSlope	-0.02
## 964	PoolQC	LandSlope	-0.01
## 965	Fence	LandSlope	-0.03
## 966	MiscFeature	LandSlope	0.05
## 967	MiscVal	LandSlope	0.00
## 968	MoSold	LandSlope	0.01
## 969	YrSold	LandSlope	0.00
## 970	SaleType	LandSlope	0.06
## 971	SaleCondition	LandSlope	-0.04
## 972	SalePrice	LandSlope	0.05
## 973	Id	Neighborhood	-0.01
## 974	MSSubClass	Neighborhood	-0.01
## 975	MSZoning	Neighborhood	-0.23
## 976	LotFrontage	Neighborhood	0.06
## 977	LotArea	Neighborhood	0.04
## 978	Street	Neighborhood	-0.01
## 979	Alley	Neighborhood	0.17
## 980	LotShape	Neighborhood	-0.03
## 981	LandContour	Neighborhood	0.00

## 982	Utilities	Neighborhood	0.05
## 983	LotConfig	Neighborhood	-0.03
## 984	LandSlope	Neighborhood	-0.08
## 985	Neighborhood	Neighborhood	1.00
## 986	Condition1	Neighborhood	-0.03
## 987	Condition2	Neighborhood	0.02
## 988	BldgType	Neighborhood	-0.01
## 989	HouseStyle	Neighborhood	0.04
## 990	OverallQual	Neighborhood	0.16
## 991	OverallCond	Neighborhood	-0.01
## 992	YearBuilt	Neighborhood	0.05
## 993	YearRemodAdd	Neighborhood	0.07
## 994	RoofStyle	Neighborhood	0.10
## 995	RoofMatl	Neighborhood	0.00
## 996	Exterior1st	Neighborhood	-0.08
## 997	Exterior2nd	Neighborhood	-0.09
## 998	MasVnrType	Neighborhood	0.06
## 999	MasVnrArea	Neighborhood	0.09
## 1000	ExterQual	Neighborhood	-0.11
## 1001	ExterCond	Neighborhood	0.02
## 1002	Foundation	Neighborhood	0.03
## 1003	BsmtQual	Neighborhood	-0.08
## 1004	BsmtCond	Neighborhood	0.04
## 1005	BsmtExposure	Neighborhood	0.08
## 1006	BsmtFinType1	Neighborhood	-0.02
## 1007	BsmtFinSF1	Neighborhood	0.10
## 1008	BsmtFinType2	Neighborhood	0.00
## 1009	BsmtFinSF2	Neighborhood	0.05
## 1010	BsmtUnfSF	Neighborhood	0.01
## 1011	TotalBsmtSF	Neighborhood	0.13
## 1012	Heating	Neighborhood	-0.01
## 1013	HeatingQC	Neighborhood	-0.01
## 1014	CentralAir	Neighborhood	0.03
## 1015	Electrical	Neighborhood	0.06
## 1016	X1stFlrSF	Neighborhood	0.15
## 1017	X2ndFlrSF	Neighborhood	0.03
## 1018	LowQualFinSF	Neighborhood	0.06
## 1019	GrLivArea	Neighborhood	0.14
## 1020	BsmtFullBath	Neighborhood	0.05
## 1021	BsmtHalfBath	Neighborhood	-0.02
## 1022	FullBath	Neighborhood	0.13
## 1023	HalfBath	Neighborhood	0.05
## 1024	BedroomAbvGr	Neighborhood	0.06
## 1025	KitchenAbvGr	Neighborhood	0.07
## 1026	KitchenQual	Neighborhood	-0.10
## 1027	TotRmsAbvGrd	Neighborhood	0.11
## 1028	Functional	Neighborhood	0.03
## 1029	Fireplaces	Neighborhood	0.06
## 1030	FireplaceQu	Neighborhood	0.05
## 1031	GarageType	Neighborhood	-0.02
## 1032	GarageYrBlt	Neighborhood	0.08
## 1033	GarageFinish	Neighborhood	0.02
## 1034	GarageCars	Neighborhood	0.16
## 1035	GarageArea	Neighborhood	0.18

## 1036	GarageQual	Neighborhood	0.05
## 1037	GarageCond	Neighborhood	0.07
## 1038	PavedDrive	Neighborhood	0.03
## 1039	WoodDeckSF	Neighborhood	0.05
## 1040	OpenPorchSF	Neighborhood	0.14
## 1041	EnclosedPorch	Neighborhood	0.04
## 1042	X3SsnPorch	Neighborhood	-0.02
## 1043	ScreenPorch	Neighborhood	0.02
## 1044	PoolArea	Neighborhood	-0.01
## 1045	PoolQC	Neighborhood	-0.01
## 1046	Fence	Neighborhood	0.00
## 1047	MiscFeature	Neighborhood	-0.02
## 1048	MiscVal	Neighborhood	0.00
## 1049	MoSold	Neighborhood	0.02
## 1050	YrSold	Neighborhood	0.04
## 1051	SaleType	Neighborhood	-0.03
## 1052	SaleCondition	Neighborhood	0.01
## 1053	SalePrice	Neighborhood	0.17
## 1054	Id	Condition1	0.00
## 1055	MSSubClass	Condition1	-0.02
## 1056	MSZoning	Condition1	-0.03
## 1057	LotFrontage	Condition1	-0.04
## 1058	LotArea	Condition1	0.02
## 1059	Street	Condition1	-0.07
## 1060	Alley	Condition1	-0.06
## 1061	LotShape	Condition1	-0.12
## 1062	LandContour	Condition1	0.02
## 1063	Utilities	Condition1	0.00
## 1064	LotConfig	Condition1	0.02
## 1065	LandSlope	Condition1	-0.02
## 1066	Neighborhood	Condition1	-0.03
## 1067	Condition1	Condition1	1.00
## 1068	Condition2	Condition1	-0.07
## 1069	BldgType	Condition1	-0.02
## 1070	HouseStyle	Condition1	0.10
## 1071	OverallQual	Condition1	0.10
## 1072	OverallCond	Condition1	-0.03
## 1073	YearBuilt	Condition1	0.16
## 1074	YearRemodAdd	Condition1	0.14
## 1075	RoofStyle	Condition1	0.00
## 1076	RoofMatl	Condition1	0.01
## 1077	Exterior1st	Condition1	0.01
## 1078	Exterior2nd	Condition1	0.00
## 1079	MasVnrType	Condition1	0.00
## 1080	MasVnrArea	Condition1	0.02
## 1081	ExterQual	Condition1	-0.07
## 1082	ExterCond	Condition1	0.08
## 1083	Foundation	Condition1	0.07
## 1084	BsmtQual	Condition1	-0.08
## 1085	BsmtCond	Condition1	0.03
## 1086	BsmtExposure	Condition1	-0.01
## 1087	BsmtFinType1	Condition1	-0.02
## 1088	BsmtFinSF1	Condition1	0.03
## 1089	BsmtFinType2	Condition1	0.00

## 1090	BsmtFinSF2	Condition1	0.03
## 1091	BsmtUnfSF	Condition1	0.01
## 1092	TotalBsmtSF	Condition1	0.06
## 1093	Heating	Condition1	-0.02
## 1094	HeatingQC	Condition1	-0.08
## 1095	CentralAir	Condition1	0.01
## 1096	Electrical	Condition1	0.08
## 1097	X1stFlrSF	Condition1	0.05
## 1098	X2ndFlrSF	Condition1	0.02
## 1099	LowQualFinSF	Condition1	-0.05
## 1100	GrLivArea	Condition1	0.05
## 1101	BsmtFullBath	Condition1	0.03
## 1102	BsmtHalfBath	Condition1	-0.06
## 1103	FullBath	Condition1	0.10
## 1104	HalfBath	Condition1	0.06
## 1105	BedroomAbvGr	Condition1	0.01
## 1106	KitchenAbvGr	Condition1	-0.08
## 1107	KitchenQual	Condition1	-0.05
## 1108	TotRmsAbvGrd	Condition1	0.05
## 1109	Functional	Condition1	-0.01
## 1110	Fireplaces	Condition1	0.01
## 1111	FireplaceQu	Condition1	0.03
## 1112	GarageType	Condition1	-0.02
## 1113	GarageYrBlt	Condition1	0.09
## 1114	GarageFinish	Condition1	-0.06
## 1115	GarageCars	Condition1	0.10
## 1116	GarageArea	Condition1	0.08
## 1117	GarageQual	Condition1	0.10
## 1118	GarageCond	Condition1	0.08
## 1119	PavedDrive	Condition1	0.11
## 1120	WoodDeckSF	Condition1	0.05
## 1121	OpenPorchSF	Condition1	0.09
## 1122	EnclosedPorch	Condition1	-0.08
## 1123	X3SsnPorch	Condition1	0.07
## 1124	ScreenPorch	Condition1	0.01
## 1125	PoolArea	Condition1	0.01
## 1126	PoolQC	Condition1	0.01
## 1127	Fence	Condition1	-0.06
## 1128	MiscFeature	Condition1	0.01
## 1129	MiscVal	Condition1	-0.01
## 1130	MoSold	Condition1	-0.01
## 1131	YrSold	Condition1	-0.01
## 1132	SaleType	Condition1	-0.01
## 1133	SaleCondition	Condition1	0.06
## 1134	SalePrice	Condition1	0.09
## 1135	Id	Condition2	0.00
## 1136	MSSubClass	Condition2	-0.04
## 1137	MSZoning	Condition2	0.04
## 1138	LotFrontage	Condition2	-0.02
## 1139	LotArea	Condition2	0.02
## 1140	Street	Condition2	0.00
## 1141	Alley	Condition2	-0.01
## 1142	LotShape	Condition2	-0.04
## 1143	LandContour	Condition2	-0.02

## 1144	Utilities	Condition2	0.00
## 1145	LotConfig	Condition2	0.03
## 1146	LandSlope	Condition2	-0.03
## 1147	Neighborhood	Condition2	0.02
## 1148	Condition1	Condition2	-0.07
## 1149	Condition2	Condition2	1.00
## 1150	BldgType	Condition2	0.01
## 1151	HouseStyle	Condition2	-0.03
## 1152	OverallQual	Condition2	0.01
## 1153	OverallCond	Condition2	0.01
## 1154	YearBuilt	Condition2	0.03
## 1155	YearRemodAdd	Condition2	0.01
## 1156	RoofStyle	Condition2	0.04
## 1157	RoofMatl	Condition2	0.00
## 1158	Exterior1st	Condition2	-0.01
## 1159	Exterior2nd	Condition2	-0.02
## 1160	MasVnrType	Condition2	0.00
## 1161	MasVnrArea	Condition2	0.04
## 1162	ExterQual	Condition2	-0.03
## 1163	ExterCond	Condition2	-0.02
## 1164	Foundation	Condition2	-0.01
## 1165	BsmtQual	Condition2	0.01
## 1166	BsmtCond	Condition2	0.03
## 1167	BsmtExposure	Condition2	0.01
## 1168	BsmtFinType1	Condition2	0.02
## 1169	BsmtFinSF1	Condition2	0.01
## 1170	BsmtFinType2	Condition2	-0.01
## 1171	BsmtFinSF2	Condition2	0.05
## 1172	BsmtUnfSF	Condition2	0.02
## 1173	TotalBsmtSF	Condition2	0.05
## 1174	Heating	Condition2	0.00
## 1175	HeatingQC	Condition2	-0.02
## 1176	CentralAir	Condition2	-0.02
## 1177	Electrical	Condition2	0.02
## 1178	X1stFlrSF	Condition2	0.04
## 1179	X2ndFlrSF	Condition2	0.00
## 1180	LowQualFinSF	Condition2	-0.04
## 1181	GrLivArea	Condition2	0.03
## 1182	BsmtFullBath	Condition2	0.00
## 1183	BsmtHalfBath	Condition2	-0.01
## 1184	FullBath	Condition2	0.02
## 1185	HalfBath	Condition2	0.02
## 1186	BedroomAbvGr	Condition2	-0.01
## 1187	KitchenAbvGr	Condition2	0.03
## 1188	KitchenQual	Condition2	-0.04
## 1189	TotRmsAbvGrd	Condition2	0.02
## 1190	Functional	Condition2	0.01
## 1191	Fireplaces	Condition2	-0.01
## 1192	FireplaceQu	Condition2	0.00
## 1193	GarageType	Condition2	0.05
## 1194	GarageYrBlt	Condition2	0.02
## 1195	GarageFinish	Condition2	0.01
## 1196	GarageCars	Condition2	0.02
## 1197	GarageArea	Condition2	0.06

##	1198	GarageQual	Condition2	0.01
##	1199	GarageCond	Condition2	0.04
##	1200	PavedDrive	Condition2	-0.01
##	1201	WoodDeckSF	Condition2	0.01
##	1202	OpenPorchSF	Condition2	0.03
##	1203	EnclosedPorch	Condition2	0.01
##	1204	X3SsnPorch	Condition2	0.00
##	1205	ScreenPorch	Condition2	-0.01
##	1206	PoolArea	Condition2	0.00
##	1207	PoolQC	Condition2	0.00
##	1208	Fence	Condition2	0.00
##	1209	MiscFeature	Condition2	-0.01
##	1210	MiscVal	Condition2	0.13
##	1211	MoSold	Condition2	0.00
##	1212	YrSold	Condition2	-0.02
##	1213	SaleType	Condition2	0.01
##	1214	SaleCondition	Condition2	0.05
##	1215	SalePrice	Condition2	0.01
##	1216	Id	BldgType	0.02
##	1217	MSSubClass	BldgType	0.75
##	1218	MSZoning	BldgType	0.01
##	1219	LotFrontage	BldgType	-0.24
##	1220	LotArea	BldgType	-0.21
##	1221	Street	BldgType	-0.02
##	1222	Alley	BldgType	0.14
##	1223	LotShape	BldgType	0.12
##	1224	LandContour	BldgType	0.05
##	1225	Utilities	BldgType	-0.01
##	1226	LotConfig	BldgType	0.11
##	1227	LandSlope	BldgType	-0.05
##	1228	Neighborhood	BldgType	-0.01
##	1229	Condition1	BldgType	-0.02
##	1230	Condition2	BldgType	0.01
##	1231	BldgType	BldgType	1.00
##	1232	HouseStyle	BldgType	0.07
##	1233	OverallQual	BldgType	0.05
##	1234	OverallCond	BldgType	-0.16
##	1235	YearBuilt	BldgType	0.22
##	1236	YearRemodAdd	BldgType	0.10
##	1237	RoofStyle	BldgType	-0.05
##	1238	RoofMatl	BldgType	-0.04
##	1239	Exterior1st	BldgType	-0.11
##	1240	Exterior2nd	BldgType	-0.14
##	1241	MasVnrType	BldgType	-0.03
##	1242	MasVnrArea	BldgType	0.04
##	1243	ExterQual	BldgType	-0.09
##	1244	ExterCond	BldgType	0.09
##	1245	Foundation	BldgType	0.14
##	1246	BsmtQual	BldgType	-0.12
##	1247	BsmtCond	BldgType	-0.01
##	1248	BsmtExposure	BldgType	-0.06
##	1249	BsmtFinType1	BldgType	-0.07
##	1250	BsmtFinSF1	BldgType	0.01
##	1251	BsmtFinType2	BldgType	-0.01

## 1252	BsmtFinSF2	BldgType	-0.02
## 1253	BsmtUnfSF	BldgType	-0.05
## 1254	TotalBsmtSF	BldgType	-0.05
## 1255	Heating	BldgType	0.01
## 1256	HeatingQC	BldgType	-0.01
## 1257	CentralAir	BldgType	0.02
## 1258	Electrical	BldgType	0.07
## 1259	X1stFlrSF	BldgType	-0.07
## 1260	X2ndFlrSF	BldgType	-0.08
## 1261	LowQualFinSF	BldgType	-0.03
## 1262	GrLivArea	BldgType	-0.13
## 1263	BsmtFullBath	BldgType	0.05
## 1264	BsmtHalfBath	BldgType	0.00
## 1265	FullBath	BldgType	0.07
## 1266	HalfBath	BldgType	-0.01
## 1267	BedroomAbvGr	BldgType	-0.28
## 1268	KitchenAbvGr	BldgType	0.18
## 1269	KitchenQual	BldgType	-0.02
## 1270	TotRmsAbvGrd	BldgType	-0.20
## 1271	Functional	BldgType	0.01
## 1272	Fireplaces	BldgType	-0.09
## 1273	FireplaceQu	BldgType	-0.07
## 1274	GarageType	BldgType	-0.02
## 1275	GarageYrBlt	BldgType	-0.02
## 1276	GarageFinish	BldgType	-0.07
## 1277	GarageCars	BldgType	0.01
## 1278	GarageArea	BldgType	-0.06
## 1279	GarageQual	BldgType	0.00
## 1280	GarageCond	BldgType	0.00
## 1281	PavedDrive	BldgType	0.06
## 1282	WoodDeckSF	BldgType	-0.01
## 1283	OpenPorchSF	BldgType	-0.04
## 1284	EnclosedPorch	BldgType	-0.11
## 1285	X3SsnPorch	BldgType	-0.02
## 1286	ScreenPorch	BldgType	-0.03
## 1287	PoolArea	BldgType	-0.03
## 1288	PoolQC	BldgType	-0.03
## 1289	Fence	BldgType	-0.15
## 1290	MiscFeature	BldgType	-0.06
## 1291	MiscVal	BldgType	-0.01
## 1292	MoSold	BldgType	-0.03
## 1293	YrSold	BldgType	0.00
## 1294	SaleType	BldgType	-0.04
## 1295	SaleCondition	BldgType	0.00
## 1296	SalePrice	BldgType	-0.09
## 1297	Id	HouseStyle	0.02
## 1298	MSSubClass	HouseStyle	0.40
## 1299	MSZoning	HouseStyle	-0.11
## 1300	LotFrontage	HouseStyle	-0.04
## 1301	LotArea	HouseStyle	-0.03
## 1302	Street	HouseStyle	0.02
## 1303	Alley	HouseStyle	-0.01
## 1304	LotShape	HouseStyle	-0.10
## 1305	LandContour	HouseStyle	0.08

##	1306	Utilities	HouseStyle	0.05
##	1307	LotConfig	HouseStyle	-0.03
##	1308	LandSlope	HouseStyle	-0.03
##	1309	Neighborhood	HouseStyle	0.04
##	1310	Condition1	HouseStyle	0.10
##	1311	Condition2	HouseStyle	-0.03
##	1312	BldgType	HouseStyle	0.07
##	1313	HouseStyle	HouseStyle	1.00
##	1314	OverallQual	HouseStyle	0.22
##	1315	OverallCond	HouseStyle	-0.03
##	1316	YearBuilt	HouseStyle	0.27
##	1317	YearRemodAdd	HouseStyle	0.21
##	1318	RoofStyle	HouseStyle	-0.03
##	1319	RoofMatl	HouseStyle	0.05
##	1320	Exterior1st	HouseStyle	-0.04
##	1321	Exterior2nd	HouseStyle	-0.07
##	1322	MasVnrType	HouseStyle	-0.13
##	1323	MasVnrArea	HouseStyle	0.17
##	1324	ExterQual	HouseStyle	-0.09
##	1325	ExterCond	HouseStyle	0.07
##	1326	Foundation	HouseStyle	0.19
##	1327	BsmtQual	HouseStyle	-0.08
##	1328	BsmtCond	HouseStyle	0.06
##	1329	BsmtExposure	HouseStyle	-0.14
##	1330	BsmtFinType1	HouseStyle	-0.01
##	1331	BsmtFinSF1	HouseStyle	0.01
##	1332	BsmtFinType2	HouseStyle	0.06
##	1333	BsmtFinSF2	HouseStyle	-0.03
##	1334	BsmtUnfSF	HouseStyle	-0.14
##	1335	TotalBsmtSF	HouseStyle	-0.14
##	1336	Heating	HouseStyle	-0.08
##	1337	HeatingQC	HouseStyle	-0.07
##	1338	CentralAir	HouseStyle	0.08
##	1339	Electrical	HouseStyle	0.16
##	1340	X1stFlrSF	HouseStyle	-0.17
##	1341	X2ndFlrSF	HouseStyle	0.48
##	1342	LowQualFinSF	HouseStyle	-0.08
##	1343	GrLivArea	HouseStyle	0.26
##	1344	BsmtFullBath	HouseStyle	0.04
##	1345	BsmtHalfBath	HouseStyle	0.04
##	1346	FullBath	HouseStyle	0.24
##	1347	HalfBath	HouseStyle	0.41
##	1348	BedroomAbvGr	HouseStyle	0.18
##	1349	KitchenAbvGr	HouseStyle	0.00
##	1350	KitchenQual	HouseStyle	-0.08
##	1351	TotRmsAbvGrd	HouseStyle	0.25
##	1352	Functional	HouseStyle	0.05
##	1353	Fireplaces	HouseStyle	0.10
##	1354	FireplaceQu	HouseStyle	0.16
##	1355	GarageType	HouseStyle	-0.06
##	1356	GarageYrBlt	HouseStyle	0.09
##	1357	GarageFinish	HouseStyle	-0.13
##	1358	GarageCars	HouseStyle	0.20
##	1359	GarageArea	HouseStyle	0.16

## 1360	GarageQual	HouseStyle	0.10
## 1361	GarageCond	HouseStyle	0.08
## 1362	PavedDrive	HouseStyle	0.12
## 1363	WoodDeckSF	HouseStyle	0.09
## 1364	OpenPorchSF	HouseStyle	0.14
## 1365	EnclosedPorch	HouseStyle	-0.07
## 1366	X3SsnPorch	HouseStyle	-0.03
## 1367	ScreenPorch	HouseStyle	-0.03
## 1368	PoolArea	HouseStyle	0.08
## 1369	PoolQC	HouseStyle	0.08
## 1370	Fence	HouseStyle	-0.06
## 1371	MiscFeature	HouseStyle	-0.05
## 1372	MiscVal	HouseStyle	-0.04
## 1373	MoSold	HouseStyle	0.03
## 1374	YrSold	HouseStyle	-0.02
## 1375	SaleType	HouseStyle	0.05
## 1376	SaleCondition	HouseStyle	0.02
## 1377	SalePrice	HouseStyle	0.18
## 1378	Id	OverallQual	-0.03
## 1379	MSSubClass	OverallQual	0.03
## 1380	MSZoning	OverallQual	-0.16
## 1381	LotFrontage	OverallQual	0.18
## 1382	LotArea	OverallQual	0.11
## 1383	Street	OverallQual	0.06
## 1384	Alley	OverallQual	-0.03
## 1385	LotShape	OverallQual	-0.19
## 1386	LandContour	OverallQual	0.03
## 1387	Utilities	OverallQual	0.00
## 1388	LotConfig	OverallQual	-0.03
## 1389	LandSlope	OverallQual	-0.07
## 1390	Neighborhood	OverallQual	0.16
## 1391	Condition1	OverallQual	0.10
## 1392	Condition2	OverallQual	0.01
## 1393	BldgType	OverallQual	0.05
## 1394	HouseStyle	OverallQual	0.22
## 1395	OverallQual	OverallQual	1.00
## 1396	OverallCond	OverallQual	-0.09
## 1397	YearBuilt	OverallQual	0.57
## 1398	YearRemodAdd	OverallQual	0.55
## 1399	RoofStyle	OverallQual	0.17
## 1400	RoofMatl	OverallQual	0.07
## 1401	Exterior1st	OverallQual	0.16
## 1402	Exterior2nd	OverallQual	0.15
## 1403	MasVnrType	OverallQual	-0.02
## 1404	MasVnrArea	OverallQual	0.41
## 1405	ExterQual	OverallQual	-0.63
## 1406	ExterCond	OverallQual	0.14
## 1407	Foundation	OverallQual	0.40
## 1408	BsmtQual	OverallQual	-0.39
## 1409	BsmtCond	OverallQual	0.19
## 1410	BsmtExposure	OverallQual	-0.12
## 1411	BsmtFinType1	OverallQual	0.12
## 1412	BsmtFinSF1	OverallQual	0.24
## 1413	BsmtFinType2	OverallQual	0.21

## 1414	BsmtFinSF2	OverallQual	-0.06
## 1415	BsmtUnfSF	OverallQual	0.31
## 1416	TotalBsmtSF	OverallQual	0.54
## 1417	Heating	OverallQual	-0.11
## 1418	HeatingQC	OverallQual	-0.43
## 1419	CentralAir	OverallQual	0.27
## 1420	Electrical	OverallQual	0.26
## 1421	X1stFlrSF	OverallQual	0.48
## 1422	X2ndFlrSF	OverallQual	0.30
## 1423	LowQualFinSF	OverallQual	-0.03
## 1424	GrLivArea	OverallQual	0.59
## 1425	BsmtFullBath	OverallQual	0.11
## 1426	BsmtHalfBath	OverallQual	-0.04
## 1427	FullBath	OverallQual	0.55
## 1428	HalfBath	OverallQual	0.27
## 1429	BedroomAbvGr	OverallQual	0.10
## 1430	KitchenAbvGr	OverallQual	-0.18
## 1431	KitchenQual	OverallQual	-0.56
## 1432	TotRmsAbvGrd	OverallQual	0.43
## 1433	Functional	OverallQual	0.16
## 1434	Fireplaces	OverallQual	0.40
## 1435	FireplaceQu	OverallQual	0.35
## 1436	GarageType	OverallQual	-0.21
## 1437	GarageYrBlt	OverallQual	0.29
## 1438	GarageFinish	OverallQual	-0.28
## 1439	GarageCars	OverallQual	0.60
## 1440	GarageArea	OverallQual	0.56
## 1441	GarageQual	OverallQual	0.28
## 1442	GarageCond	OverallQual	0.30
## 1443	PavedDrive	OverallQual	0.23
## 1444	WoodDeckSF	OverallQual	0.24
## 1445	OpenPorchSF	OverallQual	0.31
## 1446	EnclosedPorch	OverallQual	-0.11
## 1447	X3SsnPorch	OverallQual	0.03
## 1448	ScreenPorch	OverallQual	0.06
## 1449	PoolArea	OverallQual	0.07
## 1450	PoolQC	OverallQual	0.06
## 1451	Fence	OverallQual	-0.21
## 1452	MiscFeature	OverallQual	-0.09
## 1453	MiscVal	OverallQual	-0.03
## 1454	MoSold	OverallQual	0.07
## 1455	YrSold	OverallQual	-0.03
## 1456	SaleType	OverallQual	-0.05
## 1457	SaleCondition	OverallQual	0.19
## 1458	SalePrice	OverallQual	0.79
## 1459	Id	OverallCond	0.01
## 1460	MSSubClass	OverallCond	-0.06
## 1461	MSZoning	OverallCond	0.19
## 1462	LotFrontage	OverallCond	-0.05
## 1463	LotArea	OverallCond	-0.01
## 1464	Street	OverallCond	0.04
## 1465	Alley	OverallCond	0.04
## 1466	LotShape	OverallCond	0.01
## 1467	LandContour	OverallCond	-0.05

## 1468	Utilities	OverallCond	0.01
## 1469	LotConfig	OverallCond	-0.03
## 1470	LandSlope	OverallCond	0.01
## 1471	Neighborhood	OverallCond	-0.01
## 1472	Condition1	OverallCond	-0.03
## 1473	Condition2	OverallCond	0.01
## 1474	BldgType	OverallCond	-0.16
## 1475	HouseStyle	OverallCond	-0.03
## 1476	OverallQual	OverallCond	-0.09
## 1477	OverallCond	OverallCond	1.00
## 1478	YearBuilt	OverallCond	-0.38
## 1479	YearRemodAdd	OverallCond	0.07
## 1480	RoofStyle	OverallCond	-0.01
## 1481	RoofMatl	OverallCond	0.03
## 1482	Exterior1st	OverallCond	-0.04
## 1483	Exterior2nd	OverallCond	-0.03
## 1484	MasVnrType	OverallCond	0.03
## 1485	MasVnrArea	OverallCond	-0.13
## 1486	ExterQual	OverallCond	0.17
## 1487	ExterCond	OverallCond	-0.23
## 1488	Foundation	OverallCond	-0.29
## 1489	BsmtQual	OverallCond	0.25
## 1490	BsmtCond	OverallCond	0.06
## 1491	BsmtExposure	OverallCond	0.11
## 1492	BsmtFinType1	OverallCond	-0.04
## 1493	BsmtFinSF1	OverallCond	-0.05
## 1494	BsmtFinType2	OverallCond	-0.01
## 1495	BsmtFinSF2	OverallCond	0.04
## 1496	BsmtUnfSF	OverallCond	-0.14
## 1497	TotalBsmtSF	OverallCond	-0.17
## 1498	Heating	OverallCond	-0.09
## 1499	HeatingQC	OverallCond	0.05
## 1500	CentralAir	OverallCond	0.12
## 1501	Electrical	OverallCond	0.06
## 1502	X1stFlrSF	OverallCond	-0.14
## 1503	X2ndFlrSF	OverallCond	0.03
## 1504	LowQualFinSF	OverallCond	0.03
## 1505	GrLivArea	OverallCond	-0.08
## 1506	BsmtFullBath	OverallCond	-0.05
## 1507	BsmtHalfBath	OverallCond	0.12
## 1508	FullBath	OverallCond	-0.19
## 1509	HalfBath	OverallCond	-0.06
## 1510	BedroomAbvGr	OverallCond	0.01
## 1511	KitchenAbvGr	OverallCond	-0.09
## 1512	KitchenQual	OverallCond	0.07
## 1513	TotRmsAbvGrd	OverallCond	-0.06
## 1514	Functional	OverallCond	0.09
## 1515	Fireplaces	OverallCond	-0.02
## 1516	FireplaceQu	OverallCond	-0.06
## 1517	GarageType	OverallCond	0.15
## 1518	GarageYrBlt	OverallCond	-0.01
## 1519	GarageFinish	OverallCond	0.17
## 1520	GarageCars	OverallCond	-0.19
## 1521	GarageArea	OverallCond	-0.15

##	1522	GarageQual	OverallCond	-0.04
##	1523	GarageCond	OverallCond	0.00
##	1524	PavedDrive	OverallCond	-0.06
##	1525	WoodDeckSF	OverallCond	0.00
##	1526	OpenPorchSF	OverallCond	-0.03
##	1527	EnclosedPorch	OverallCond	0.07
##	1528	X3SsnPorch	OverallCond	0.03
##	1529	ScreenPorch	OverallCond	0.05
##	1530	PoolArea	OverallCond	0.00
##	1531	PoolQC	OverallCond	0.01
##	1532	Fence	OverallCond	0.16
##	1533	MiscFeature	OverallCond	0.07
##	1534	MiscVal	OverallCond	0.07
##	1535	MoSold	OverallCond	0.00
##	1536	YrSold	OverallCond	0.04
##	1537	SaleType	OverallCond	0.10
##	1538	SaleCondition	OverallCond	0.02
##	1539	SalePrice	OverallCond	-0.08
##	1540	Id	YearBuilt	-0.01
##	1541	MSSubClass	YearBuilt	0.03
##	1542	MSZoning	YearBuilt	-0.31
##	1543	LotFrontage	YearBuilt	0.04
##	1544	LotArea	YearBuilt	0.01
##	1545	Street	YearBuilt	0.02
##	1546	Alley	YearBuilt	-0.17
##	1547	LotShape	YearBuilt	-0.23
##	1548	LandContour	YearBuilt	0.16
##	1549	Utilities	YearBuilt	-0.01
##	1550	LotConfig	YearBuilt	0.01
##	1551	LandSlope	YearBuilt	-0.07
##	1552	Neighborhood	YearBuilt	0.05
##	1553	Condition1	YearBuilt	0.16
##	1554	Condition2	YearBuilt	0.03
##	1555	BldgType	YearBuilt	0.22
##	1556	HouseStyle	YearBuilt	0.27
##	1557	OverallQual	YearBuilt	0.57
##	1558	OverallCond	YearBuilt	-0.38
##	1559	YearBuilt	YearBuilt	1.00
##	1560	YearRemodAdd	YearBuilt	0.59
##	1561	RoofStyle	YearBuilt	0.05
##	1562	RoofMatl	YearBuilt	-0.02
##	1563	Exterior1st	YearBuilt	0.10
##	1564	Exterior2nd	YearBuilt	0.08
##	1565	MasVnrType	YearBuilt	-0.08
##	1566	MasVnrArea	YearBuilt	0.31
##	1567	ExterQual	YearBuilt	-0.49
##	1568	ExterCond	YearBuilt	0.27
##	1569	Foundation	YearBuilt	0.63
##	1570	BsmtQual	YearBuilt	-0.42
##	1571	BsmtCond	YearBuilt	0.17
##	1572	BsmtExposure	YearBuilt	-0.24
##	1573	BsmtFinType1	YearBuilt	-0.10
##	1574	BsmtFinSF1	YearBuilt	0.25
##	1575	BsmtFinType2	YearBuilt	0.09

##	1576	BsmtFinSF2	YearBuilt	-0.05
##	1577	BsmtUnfSF	YearBuilt	0.15
##	1578	TotalBsmtSF	YearBuilt	0.39
##	1579	Heating	YearBuilt	-0.17
##	1580	HeatingQC	YearBuilt	-0.40
##	1581	CentralAir	YearBuilt	0.38
##	1582	Electrical	YearBuilt	0.33
##	1583	X1stFlrSF	YearBuilt	0.28
##	1584	X2ndFlrSF	YearBuilt	0.01
##	1585	LowQualFinSF	YearBuilt	-0.18
##	1586	GrLivArea	YearBuilt	0.20
##	1587	BsmtFullBath	YearBuilt	0.19
##	1588	BsmtHalfBath	YearBuilt	-0.04
##	1589	FullBath	YearBuilt	0.47
##	1590	HalfBath	YearBuilt	0.24
##	1591	BedroomAbvGr	YearBuilt	-0.07
##	1592	KitchenAbvGr	YearBuilt	-0.17
##	1593	KitchenQual	YearBuilt	-0.36
##	1594	TotRmsAbvGrd	YearBuilt	0.10
##	1595	Functional	YearBuilt	0.15
##	1596	Fireplaces	YearBuilt	0.15
##	1597	FireplaceQu	YearBuilt	0.21
##	1598	GarageType	YearBuilt	-0.36
##	1599	GarageYrBlt	YearBuilt	0.27
##	1600	GarageFinish	YearBuilt	-0.34
##	1601	GarageCars	YearBuilt	0.54
##	1602	GarageArea	YearBuilt	0.48
##	1603	GarageQual	YearBuilt	0.35
##	1604	GarageCond	YearBuilt	0.32
##	1605	PavedDrive	YearBuilt	0.43
##	1606	WoodDeckSF	YearBuilt	0.22
##	1607	OpenPorchSF	YearBuilt	0.19
##	1608	EnclosedPorch	YearBuilt	-0.39
##	1609	X3SsnPorch	YearBuilt	0.03
##	1610	ScreenPorch	YearBuilt	-0.05
##	1611	PoolArea	YearBuilt	0.00
##	1612	PoolQC	YearBuilt	0.01
##	1613	Fence	YearBuilt	-0.22
##	1614	MiscFeature	YearBuilt	-0.08
##	1615	MiscVal	YearBuilt	-0.03
##	1616	MoSold	YearBuilt	0.01
##	1617	YrSold	YearBuilt	-0.01
##	1618	SaleType	YearBuilt	-0.05
##	1619	SaleCondition	YearBuilt	0.20
##	1620	SalePrice	YearBuilt	0.52
##	1621	Id	YearRemodAdd	-0.02
##	1622	MSSubClass	YearRemodAdd	0.04
##	1623	MSZoning	YearRemodAdd	-0.17
##	1624	LotFrontage	YearRemodAdd	0.08
##	1625	LotArea	YearRemodAdd	0.01
##	1626	Street	YearRemodAdd	0.07
##	1627	Alley	YearRemodAdd	0.01
##	1628	LotShape	YearRemodAdd	-0.15
##	1629	LandContour	YearRemodAdd	0.09

## 1630	Utilities	YearRemodAdd	-0.03
## 1631	LotConfig	YearRemodAdd	-0.01
## 1632	LandSlope	YearRemodAdd	-0.06
## 1633	Neighborhood	YearRemodAdd	0.07
## 1634	Condition1	YearRemodAdd	0.14
## 1635	Condition2	YearRemodAdd	0.01
## 1636	BldgType	YearRemodAdd	0.10
## 1637	HouseStyle	YearRemodAdd	0.21
## 1638	OverallQual	YearRemodAdd	0.55
## 1639	OverallCond	YearRemodAdd	0.07
## 1640	YearBuilt	YearRemodAdd	0.59
## 1641	YearRemodAdd	YearRemodAdd	1.00
## 1642	RoofStyle	YearRemodAdd	0.03
## 1643	RoofMatl	YearRemodAdd	-0.03
## 1644	Exterior1st	YearRemodAdd	0.24
## 1645	Exterior2nd	YearRemodAdd	0.22
## 1646	MasVnrType	YearRemodAdd	0.04
## 1647	MasVnrArea	YearRemodAdd	0.18
## 1648	ExterQual	YearRemodAdd	-0.48
## 1649	ExterCond	YearRemodAdd	0.08
## 1650	Foundation	YearRemodAdd	0.44
## 1651	BsmtQual	YearRemodAdd	-0.32
## 1652	BsmtCond	YearRemodAdd	0.11
## 1653	BsmtExposure	YearRemodAdd	-0.13
## 1654	BsmtFinType1	YearRemodAdd	0.05
## 1655	BsmtFinSF1	YearRemodAdd	0.13
## 1656	BsmtFinType2	YearRemodAdd	0.15
## 1657	BsmtFinSF2	YearRemodAdd	-0.07
## 1658	BsmtUnfSF	YearRemodAdd	0.18
## 1659	TotalBsmtSF	YearRemodAdd	0.29
## 1660	Heating	YearRemodAdd	-0.16
## 1661	HeatingQC	YearRemodAdd	-0.50
## 1662	CentralAir	YearRemodAdd	0.30
## 1663	Electrical	YearRemodAdd	0.34
## 1664	X1stFlrSF	YearRemodAdd	0.24
## 1665	X2ndFlrSF	YearRemodAdd	0.14
## 1666	LowQualFinSF	YearRemodAdd	-0.06
## 1667	GrLivArea	YearRemodAdd	0.29
## 1668	BsmtFullBath	YearRemodAdd	0.12
## 1669	BsmtHalfBath	YearRemodAdd	-0.01
## 1670	FullBath	YearRemodAdd	0.44
## 1671	HalfBath	YearRemodAdd	0.18
## 1672	BedroomAbvGr	YearRemodAdd	-0.04
## 1673	KitchenAbvGr	YearRemodAdd	-0.15
## 1674	KitchenQual	YearRemodAdd	-0.45
## 1675	TotRmsAbvGrd	YearRemodAdd	0.19
## 1676	Functional	YearRemodAdd	0.08
## 1677	Fireplaces	YearRemodAdd	0.11
## 1678	FireplaceQu	YearRemodAdd	0.13
## 1679	GarageType	YearRemodAdd	-0.23
## 1680	GarageYrBlt	YearRemodAdd	0.15
## 1681	GarageFinish	YearRemodAdd	-0.31
## 1682	GarageCars	YearRemodAdd	0.42
## 1683	GarageArea	YearRemodAdd	0.37

## 1684	GarageQual	YearRemodAdd	0.16
## 1685	GarageCond	YearRemodAdd	0.17
## 1686	PavedDrive	YearRemodAdd	0.17
## 1687	WoodDeckSF	YearRemodAdd	0.21
## 1688	OpenPorchSF	YearRemodAdd	0.23
## 1689	EnclosedPorch	YearRemodAdd	-0.19
## 1690	X3SsnPorch	YearRemodAdd	0.05
## 1691	ScreenPorch	YearRemodAdd	-0.04
## 1692	PoolArea	YearRemodAdd	0.01
## 1693	PoolQC	YearRemodAdd	0.00
## 1694	Fence	YearRemodAdd	-0.17
## 1695	MiscFeature	YearRemodAdd	-0.09
## 1696	MiscVal	YearRemodAdd	-0.01
## 1697	MoSold	YearRemodAdd	0.02
## 1698	YrSold	YearRemodAdd	0.04
## 1699	SaleType	YearRemodAdd	0.02
## 1700	SaleCondition	YearRemodAdd	0.22
## 1701	SalePrice	YearRemodAdd	0.51
## 1702	Id	RoofStyle	0.04
## 1703	MSSubClass	RoofStyle	-0.12
## 1704	MSZoning	RoofStyle	0.00
## 1705	LotFrontage	RoofStyle	0.12
## 1706	LotArea	RoofStyle	0.08
## 1707	Street	RoofStyle	-0.02
## 1708	Alley	RoofStyle	-0.05
## 1709	LotShape	RoofStyle	0.00
## 1710	LandContour	RoofStyle	0.00
## 1711	Utilities	RoofStyle	-0.01
## 1712	LotConfig	RoofStyle	-0.01
## 1713	LandSlope	RoofStyle	-0.03
## 1714	Neighborhood	RoofStyle	0.10
## 1715	Condition1	RoofStyle	0.00
## 1716	Condition2	RoofStyle	0.04
## 1717	BldgType	RoofStyle	-0.05
## 1718	HouseStyle	RoofStyle	-0.03
## 1719	OverallQual	RoofStyle	0.17
## 1720	OverallCond	RoofStyle	-0.01
## 1721	YearBuilt	RoofStyle	0.05
## 1722	YearRemodAdd	RoofStyle	0.03
## 1723	RoofStyle	RoofStyle	1.00
## 1724	RoofMatl	RoofStyle	-0.01
## 1725	Exterior1st	RoofStyle	-0.04
## 1726	Exterior2nd	RoofStyle	-0.07
## 1727	MasVnrType	RoofStyle	-0.08
## 1728	MasVnrArea	RoofStyle	0.25
## 1729	ExterQual	RoofStyle	-0.19
## 1730	ExterCond	RoofStyle	0.03
## 1731	Foundation	RoofStyle	0.02
## 1732	BsmtQual	RoofStyle	-0.11
## 1733	BsmtCond	RoofStyle	0.00
## 1734	BsmtExposure	RoofStyle	-0.01
## 1735	BsmtFinType1	RoofStyle	-0.04
## 1736	BsmtFinSF1	RoofStyle	0.19
## 1737	BsmtFinType2	RoofStyle	0.02

## 1738	BsmtFinSF2	RoofStyle	0.01
## 1739	BsmtUnfSF	RoofStyle	0.05
## 1740	TotalBsmtSF	RoofStyle	0.25
## 1741	Heating	RoofStyle	-0.04
## 1742	HeatingQC	RoofStyle	-0.02
## 1743	CentralAir	RoofStyle	0.01
## 1744	Electrical	RoofStyle	0.03
## 1745	X1stFlrSF	RoofStyle	0.30
## 1746	X2ndFlrSF	RoofStyle	-0.07
## 1747	LowQualFinSF	RoofStyle	-0.02
## 1748	GrLivArea	RoofStyle	0.16
## 1749	BsmtFullBath	RoofStyle	0.09
## 1750	BsmtHalfBath	RoofStyle	0.00
## 1751	FullBath	RoofStyle	0.02
## 1752	HalfBath	RoofStyle	-0.01
## 1753	BedroomAbvGr	RoofStyle	0.02
## 1754	KitchenAbvGr	RoofStyle	0.00
## 1755	KitchenQual	RoofStyle	-0.12
## 1756	TotRmsAbvGrd	RoofStyle	0.15
## 1757	Functional	RoofStyle	-0.02
## 1758	Fireplaces	RoofStyle	0.12
## 1759	FireplaceQu	RoofStyle	0.09
## 1760	GarageType	RoofStyle	-0.04
## 1761	GarageYrBlt	RoofStyle	0.06
## 1762	GarageFinish	RoofStyle	-0.07
## 1763	GarageCars	RoofStyle	0.13
## 1764	GarageArea	RoofStyle	0.14
## 1765	GarageQual	RoofStyle	0.07
## 1766	GarageCond	RoofStyle	0.05
## 1767	PavedDrive	RoofStyle	0.00
## 1768	WoodDeckSF	RoofStyle	0.08
## 1769	OpenPorchSF	RoofStyle	0.01
## 1770	EnclosedPorch	RoofStyle	-0.01
## 1771	X3SsnPorch	RoofStyle	0.02
## 1772	ScreenPorch	RoofStyle	0.07
## 1773	PoolArea	RoofStyle	0.02
## 1774	PoolQC	RoofStyle	0.01
## 1775	Fence	RoofStyle	0.01
## 1776	MiscFeature	RoofStyle	0.00
## 1777	MiscVal	RoofStyle	0.10
## 1778	MoSold	RoofStyle	0.01
## 1779	YrSold	RoofStyle	0.02
## 1780	SaleType	RoofStyle	-0.03
## 1781	SaleCondition	RoofStyle	0.07
## 1782	SalePrice	RoofStyle	0.22
## 1783	Id	RoofMatl	-0.02
## 1784	MSSubClass	RoofMatl	-0.03
## 1785	MSZoning	RoofMatl	0.01
## 1786	LotFrontage	RoofMatl	0.02
## 1787	LotArea	RoofMatl	0.15
## 1788	Street	RoofMatl	0.01
## 1789	Alley	RoofMatl	-0.03
## 1790	LotShape	RoofMatl	-0.07
## 1791	LandContour	RoofMatl	-0.02

## 1792	Utilities	RoofMatl	0.00
## 1793	LotConfig	RoofMatl	-0.07
## 1794	LandSlope	RoofMatl	0.18
## 1795	Neighborhood	RoofMatl	0.00
## 1796	Condition1	RoofMatl	0.01
## 1797	Condition2	RoofMatl	0.00
## 1798	BldgType	RoofMatl	-0.04
## 1799	HouseStyle	RoofMatl	0.05
## 1800	OverallQual	RoofMatl	0.07
## 1801	OverallCond	RoofMatl	0.03
## 1802	YearBuilt	RoofMatl	-0.02
## 1803	YearRemodAdd	RoofMatl	-0.03
## 1804	RoofStyle	RoofMatl	-0.01
## 1805	RoofMatl	RoofMatl	1.00
## 1806	Exterior1st	RoofMatl	0.00
## 1807	Exterior2nd	RoofMatl	-0.01
## 1808	MasVnrType	RoofMatl	-0.01
## 1809	MasVnrArea	RoofMatl	0.04
## 1810	ExterQual	RoofMatl	-0.02
## 1811	ExterCond	RoofMatl	-0.04
## 1812	Foundation	RoofMatl	-0.03
## 1813	BsmtQual	RoofMatl	-0.02
## 1814	BsmtCond	RoofMatl	-0.02
## 1815	BsmtExposure	RoofMatl	-0.08
## 1816	BsmtFinType1	RoofMatl	-0.03
## 1817	BsmtFinSF1	RoofMatl	0.04
## 1818	BsmtFinType2	RoofMatl	-0.02
## 1819	BsmtFinSF2	RoofMatl	0.07
## 1820	BsmtUnfSF	RoofMatl	0.00
## 1821	TotalBsmtSF	RoofMatl	0.07
## 1822	Heating	RoofMatl	0.00
## 1823	HeatingQC	RoofMatl	0.06
## 1824	CentralAir	RoofMatl	0.01
## 1825	Electrical	RoofMatl	0.01
## 1826	X1stFlrSF	RoofMatl	0.15
## 1827	X2ndFlrSF	RoofMatl	0.01
## 1828	LowQualFinSF	RoofMatl	0.07
## 1829	GrLivArea	RoofMatl	0.13
## 1830	BsmtFullBath	RoofMatl	0.05
## 1831	BsmtHalfBath	RoofMatl	0.08
## 1832	FullBath	RoofMatl	0.01
## 1833	HalfBath	RoofMatl	0.03
## 1834	BedroomAbvGr	RoofMatl	-0.02
## 1835	KitchenAbvGr	RoofMatl	-0.03
## 1836	KitchenQual	RoofMatl	-0.04
## 1837	TotRmsAbvGrd	RoofMatl	0.05
## 1838	Functional	RoofMatl	-0.03
## 1839	Fireplaces	RoofMatl	0.09
## 1840	FireplaceQu	RoofMatl	0.06
## 1841	GarageType	RoofMatl	-0.03
## 1842	GarageYrBlt	RoofMatl	0.01
## 1843	GarageFinish	RoofMatl	-0.02
## 1844	GarageCars	RoofMatl	0.04
## 1845	GarageArea	RoofMatl	0.05

## 1846	GarageQual	RoofMatl	-0.01
## 1847	GarageCond	RoofMatl	-0.01
## 1848	PavedDrive	RoofMatl	0.04
## 1849	WoodDeckSF	RoofMatl	0.12
## 1850	OpenPorchSF	RoofMatl	0.05
## 1851	EnclosedPorch	RoofMatl	-0.03
## 1852	X3SsnPorch	RoofMatl	0.00
## 1853	ScreenPorch	RoofMatl	0.10
## 1854	PoolArea	RoofMatl	0.06
## 1855	PoolQC	RoofMatl	0.06
## 1856	Fence	RoofMatl	-0.01
## 1857	MiscFeature	RoofMatl	-0.02
## 1858	MiscVal	RoofMatl	-0.01
## 1859	MoSold	RoofMatl	0.03
## 1860	YrSold	RoofMatl	-0.03
## 1861	SaleType	RoofMatl	0.01
## 1862	SaleCondition	RoofMatl	-0.05
## 1863	SalePrice	RoofMatl	0.13
## 1864	Id	Exterior1st	-0.03
## 1865	MSSubClass	Exterior1st	-0.09
## 1866	MSZoning	Exterior1st	-0.01
## 1867	LotFrontage	Exterior1st	0.09
## 1868	LotArea	Exterior1st	0.00
## 1869	Street	Exterior1st	0.00
## 1870	Alley	Exterior1st	0.02
## 1871	LotShape	Exterior1st	-0.02
## 1872	LandContour	Exterior1st	-0.01
## 1873	Utilities	Exterior1st	-0.03
## 1874	LotConfig	Exterior1st	0.02
## 1875	LandSlope	Exterior1st	-0.05
## 1876	Neighborhood	Exterior1st	-0.08
## 1877	Condition1	Exterior1st	0.01
## 1878	Condition2	Exterior1st	-0.01
## 1879	BldgType	Exterior1st	-0.11
## 1880	HouseStyle	Exterior1st	-0.04
## 1881	OverallQual	Exterior1st	0.16
## 1882	OverallCond	Exterior1st	-0.04
## 1883	YearBuilt	Exterior1st	0.10
## 1884	YearRemodAdd	Exterior1st	0.24
## 1885	RoofStyle	Exterior1st	-0.04
## 1886	RoofMatl	Exterior1st	0.00
## 1887	Exterior1st	Exterior1st	1.00
## 1888	Exterior2nd	Exterior1st	0.85
## 1889	MasVnrType	Exterior1st	0.02
## 1890	MasVnrArea	Exterior1st	0.02
## 1891	ExterQual	Exterior1st	-0.14
## 1892	ExterCond	Exterior1st	0.02
## 1893	Foundation	Exterior1st	0.12
## 1894	BsmtQual	Exterior1st	-0.09
## 1895	BsmtCond	Exterior1st	0.03
## 1896	BsmtExposure	Exterior1st	-0.02
## 1897	BsmtFinType1	Exterior1st	0.17
## 1898	BsmtFinSF1	Exterior1st	-0.07
## 1899	BsmtFinType2	Exterior1st	0.09

## 1900	BsmtFinSF2	Exterior1st	-0.05
## 1901	BsmtUnfSF	Exterior1st	0.13
## 1902	TotalBsmtSF	Exterior1st	0.05
## 1903	Heating	Exterior1st	-0.07
## 1904	HeatingQC	Exterior1st	-0.25
## 1905	CentralAir	Exterior1st	0.03
## 1906	Electrical	Exterior1st	0.03
## 1907	X1stFlrSF	Exterior1st	0.01
## 1908	X2ndFlrSF	Exterior1st	0.07
## 1909	LowQualFinSF	Exterior1st	0.04
## 1910	GrLivArea	Exterior1st	0.07
## 1911	BsmtFullBath	Exterior1st	-0.01
## 1912	BsmtHalfBath	Exterior1st	0.00
## 1913	FullBath	Exterior1st	0.12
## 1914	HalfBath	Exterior1st	-0.01
## 1915	BedroomAbvGr	Exterior1st	0.00
## 1916	KitchenAbvGr	Exterior1st	-0.09
## 1917	KitchenQual	Exterior1st	-0.12
## 1918	TotRmsAbvGrd	Exterior1st	0.07
## 1919	Functional	Exterior1st	0.03
## 1920	Fireplaces	Exterior1st	0.01
## 1921	FireplaceQu	Exterior1st	0.02
## 1922	GarageType	Exterior1st	0.00
## 1923	GarageYrBlt	Exterior1st	0.03
## 1924	GarageFinish	Exterior1st	-0.07
## 1925	GarageCars	Exterior1st	0.12
## 1926	GarageArea	Exterior1st	0.10
## 1927	GarageQual	Exterior1st	0.02
## 1928	GarageCond	Exterior1st	0.03
## 1929	PavedDrive	Exterior1st	-0.06
## 1930	WoodDeckSF	Exterior1st	0.05
## 1931	OpenPorchSF	Exterior1st	0.08
## 1932	EnclosedPorch	Exterior1st	-0.02
## 1933	X3SsnPorch	Exterior1st	-0.04
## 1934	ScreenPorch	Exterior1st	-0.05
## 1935	PoolArea	Exterior1st	0.00
## 1936	PoolQC	Exterior1st	0.00
## 1937	Fence	Exterior1st	-0.12
## 1938	MiscFeature	Exterior1st	-0.01
## 1939	MiscVal	Exterior1st	-0.02
## 1940	MoSold	Exterior1st	0.00
## 1941	YrSold	Exterior1st	-0.04
## 1942	SaleType	Exterior1st	0.01
## 1943	SaleCondition	Exterior1st	0.06
## 1944	SalePrice	Exterior1st	0.10
## 1945	Id	Exterior2nd	-0.04
## 1946	MSSubClass	Exterior2nd	-0.14
## 1947	MSZoning	Exterior2nd	0.01
## 1948	LotFrontage	Exterior2nd	0.10
## 1949	LotArea	Exterior2nd	0.00
## 1950	Street	Exterior2nd	0.01
## 1951	Alley	Exterior2nd	0.03
## 1952	LotShape	Exterior2nd	-0.03
## 1953	LandContour	Exterior2nd	-0.03

## 1954	Utilities	Exterior2nd	-0.03
## 1955	LotConfig	Exterior2nd	0.01
## 1956	LandSlope	Exterior2nd	-0.03
## 1957	Neighborhood	Exterior2nd	-0.09
## 1958	Condition1	Exterior2nd	0.00
## 1959	Condition2	Exterior2nd	-0.02
## 1960	BldgType	Exterior2nd	-0.14
## 1961	HouseStyle	Exterior2nd	-0.07
## 1962	OverallQual	Exterior2nd	0.15
## 1963	OverallCond	Exterior2nd	-0.03
## 1964	YearBuilt	Exterior2nd	0.08
## 1965	YearRemodAdd	Exterior2nd	0.22
## 1966	RoofStyle	Exterior2nd	-0.07
## 1967	RoofMatl	Exterior2nd	-0.01
## 1968	Exterior1st	Exterior2nd	0.85
## 1969	Exterior2nd	Exterior2nd	1.00
## 1970	MasVnrType	Exterior2nd	0.05
## 1971	MasVnrArea	Exterior2nd	0.00
## 1972	ExterQual	Exterior2nd	-0.11
## 1973	ExterCond	Exterior2nd	0.03
## 1974	Foundation	Exterior2nd	0.12
## 1975	BsmtQual	Exterior2nd	-0.10
## 1976	BsmtCond	Exterior2nd	0.00
## 1977	BsmtExposure	Exterior2nd	-0.03
## 1978	BsmtFinType1	Exterior2nd	0.15
## 1979	BsmtFinSF1	Exterior2nd	-0.08
## 1980	BsmtFinType2	Exterior2nd	0.05
## 1981	BsmtFinSF2	Exterior2nd	-0.04
## 1982	BsmtUnfSF	Exterior2nd	0.13
## 1983	TotalBsmtSF	Exterior2nd	0.04
## 1984	Heating	Exterior2nd	-0.03
## 1985	HeatingQC	Exterior2nd	-0.24
## 1986	CentralAir	Exterior2nd	0.01
## 1987	Electrical	Exterior2nd	-0.02
## 1988	X1stFlrSF	Exterior2nd	0.02
## 1989	X2ndFlrSF	Exterior2nd	0.06
## 1990	LowQualFinSF	Exterior2nd	0.03
## 1991	GrLivArea	Exterior2nd	0.07
## 1992	BsmtFullBath	Exterior2nd	-0.01
## 1993	BsmtHalfBath	Exterior2nd	-0.05
## 1994	FullBath	Exterior2nd	0.11
## 1995	HalfBath	Exterior2nd	-0.01
## 1996	BedroomAbvGr	Exterior2nd	0.01
## 1997	KitchenAbvGr	Exterior2nd	-0.05
## 1998	KitchenQual	Exterior2nd	-0.11
## 1999	TotRmsAbvGrd	Exterior2nd	0.07
## 2000	Functional	Exterior2nd	0.01
## 2001	Fireplaces	Exterior2nd	0.02
## 2002	FireplaceQu	Exterior2nd	0.01
## 2003	GarageType	Exterior2nd	0.01
## 2004	GarageYrBlt	Exterior2nd	0.03
## 2005	GarageFinish	Exterior2nd	-0.05
## 2006	GarageCars	Exterior2nd	0.12
## 2007	GarageArea	Exterior2nd	0.10

##	2008	GarageQual	Exterior2nd	0.00
##	2009	GarageCond	Exterior2nd	0.03
##	2010	PavedDrive	Exterior2nd	-0.04
##	2011	WoodDeckSF	Exterior2nd	0.03
##	2012	OpenPorchSF	Exterior2nd	0.08
##	2013	EnclosedPorch	Exterior2nd	-0.02
##	2014	X3SsnPorch	Exterior2nd	-0.02
##	2015	ScreenPorch	Exterior2nd	-0.02
##	2016	PoolArea	Exterior2nd	-0.02
##	2017	PoolQC	Exterior2nd	-0.01
##	2018	Fence	Exterior2nd	-0.10
##	2019	MiscFeature	Exterior2nd	-0.02
##	2020	MiscVal	Exterior2nd	-0.01
##	2021	MoSold	Exterior2nd	-0.02
##	2022	YrSold	Exterior2nd	-0.03
##	2023	SaleType	Exterior2nd	0.02
##	2024	SaleCondition	Exterior2nd	0.07
##	2025	SalePrice	Exterior2nd	0.10
##	2026	Id	MasVnrType	0.04
##	2027	MSSubClass	MasVnrType	-0.02
##	2028	MSZoning	MasVnrType	0.00
##	2029	LotFrontage	MasVnrType	0.09
##	2030	LotArea	MasVnrType	-0.01
##	2031	Street	MasVnrType	0.01
##	2032	Alley	MasVnrType	0.05
##	2033	LotShape	MasVnrType	0.00
##	2034	LandContour	MasVnrType	-0.08
##	2035	Utilities	MasVnrType	-0.03
##	2036	LotConfig	MasVnrType	0.00
##	2037	LandSlope	MasVnrType	0.04
##	2038	Neighborhood	MasVnrType	0.06
##	2039	Condition1	MasVnrType	0.00
##	2040	Condition2	MasVnrType	0.00
##	2041	BldgType	MasVnrType	-0.03
##	2042	HouseStyle	MasVnrType	-0.13
##	2043	OverallQual	MasVnrType	-0.02
##	2044	OverallCond	MasVnrType	0.03
##	2045	YearBuilt	MasVnrType	-0.08
##	2046	YearRemodAdd	MasVnrType	0.04
##	2047	RoofStyle	MasVnrType	-0.08
##	2048	RoofMatl	MasVnrType	-0.01
##	2049	Exterior1st	MasVnrType	0.02
##	2050	Exterior2nd	MasVnrType	0.05
##	2051	MasVnrType	MasVnrType	1.00
##	2052	MasVnrArea	MasVnrType	-0.32
##	2053	ExterQual	MasVnrType	-0.05
##	2054	ExterCond	MasVnrType	0.00
##	2055	Foundation	MasVnrType	0.00
##	2056	BsmtQual	MasVnrType	-0.10
##	2057	BsmtCond	MasVnrType	-0.05
##	2058	BsmtExposure	MasVnrType	-0.04
##	2059	BsmtFinType1	MasVnrType	0.05
##	2060	BsmtFinSF1	MasVnrType	-0.02
##	2061	BsmtFinType2	MasVnrType	-0.01

##	2062	BsmtFinSF2	MasVnrType	-0.02
##	2063	BsmtUnfSF	MasVnrType	0.02
##	2064	TotalBsmtSF	MasVnrType	-0.01
##	2065	Heating	MasVnrType	0.03
##	2066	HeatingQC	MasVnrType	-0.06
##	2067	CentralAir	MasVnrType	-0.08
##	2068	Electrical	MasVnrType	-0.07
##	2069	X1stFlrSF	MasVnrType	-0.03
##	2070	X2ndFlrSF	MasVnrType	-0.05
##	2071	LowQualFinSF	MasVnrType	0.05
##	2072	GrLivArea	MasVnrType	-0.06
##	2073	BsmtFullBath	MasVnrType	0.00
##	2074	BsmtHalfBath	MasVnrType	-0.07
##	2075	FullBath	MasVnrType	-0.04
##	2076	HalfBath	MasVnrType	-0.13
##	2077	BedroomAbvGr	MasVnrType	-0.08
##	2078	KitchenAbvGr	MasVnrType	0.01
##	2079	KitchenQual	MasVnrType	-0.10
##	2080	TotRmsAbvGrd	MasVnrType	-0.02
##	2081	Functional	MasVnrType	-0.04
##	2082	Fireplaces	MasVnrType	-0.05
##	2083	FireplaceQu	MasVnrType	-0.13
##	2084	GarageType	MasVnrType	0.10
##	2085	GarageYrBlt	MasVnrType	-0.07
##	2086	GarageFinish	MasVnrType	0.01
##	2087	GarageCars	MasVnrType	-0.04
##	2088	GarageArea	MasVnrType	-0.02
##	2089	GarageQual	MasVnrType	-0.09
##	2090	GarageCond	MasVnrType	-0.09
##	2091	PavedDrive	MasVnrType	-0.09
##	2092	WoodDeckSF	MasVnrType	-0.03
##	2093	OpenPorchSF	MasVnrType	0.01
##	2094	EnclosedPorch	MasVnrType	0.04
##	2095	X3SsnPorch	MasVnrType	-0.03
##	2096	ScreenPorch	MasVnrType	-0.02
##	2097	PoolArea	MasVnrType	0.01
##	2098	PoolQC	MasVnrType	0.02
##	2099	Fence	MasVnrType	-0.03
##	2100	MiscFeature	MasVnrType	-0.01
##	2101	MiscVal	MasVnrType	0.01
##	2102	MoSold	MasVnrType	0.00
##	2103	YrSold	MasVnrType	0.06
##	2104	SaleType	MasVnrType	-0.02
##	2105	SaleCondition	MasVnrType	0.07
##	2106	SalePrice	MasVnrType	0.00
##	2107	Id	MasVnrArea	-0.05
##	2108	MSSubClass	MasVnrArea	0.02
##	2109	MSZoning	MasVnrArea	-0.06
##	2110	LotFrontage	MasVnrArea	0.11
##	2111	LotArea	MasVnrArea	0.10
##	2112	Street	MasVnrArea	0.02
##	2113	Alley	MasVnrArea	-0.02
##	2114	LotShape	MasVnrArea	-0.11
##	2115	LandContour	MasVnrArea	0.05

##	2116	Utilities	MasVnrArea	0.06
##	2117	LotConfig	MasVnrArea	-0.03
##	2118	LandSlope	MasVnrArea	-0.02
##	2119	Neighborhood	MasVnrArea	0.09
##	2120	Condition1	MasVnrArea	0.02
##	2121	Condition2	MasVnrArea	0.04
##	2122	BldgType	MasVnrArea	0.04
##	2123	HouseStyle	MasVnrArea	0.17
##	2124	OverallQual	MasVnrArea	0.41
##	2125	OverallCond	MasVnrArea	-0.13
##	2126	YearBuilt	MasVnrArea	0.31
##	2127	YearRemodAdd	MasVnrArea	0.18
##	2128	RoofStyle	MasVnrArea	0.25
##	2129	RoofMatl	MasVnrArea	0.04
##	2130	Exterior1st	MasVnrArea	0.02
##	2131	Exterior2nd	MasVnrArea	0.00
##	2132	MasVnrType	MasVnrArea	-0.32
##	2133	MasVnrArea	MasVnrArea	1.00
##	2134	ExterQual	MasVnrArea	-0.35
##	2135	ExterCond	MasVnrArea	0.07
##	2136	Foundation	MasVnrArea	0.17
##	2137	BsmtQual	MasVnrArea	-0.24
##	2138	BsmtCond	MasVnrArea	0.09
##	2139	BsmtExposure	MasVnrArea	-0.09
##	2140	BsmtFinType1	MasVnrArea	-0.04
##	2141	BsmtFinSF1	MasVnrArea	0.26
##	2142	BsmtFinType2	MasVnrArea	0.07
##	2143	BsmtFinSF2	MasVnrArea	-0.07
##	2144	BsmtUnfSF	MasVnrArea	0.11
##	2145	TotalBsmtSF	MasVnrArea	0.36
##	2146	Heating	MasVnrArea	-0.05
##	2147	HeatingQC	MasVnrArea	-0.14
##	2148	CentralAir	MasVnrArea	0.13
##	2149	Electrical	MasVnrArea	0.11
##	2150	X1stFlrSF	MasVnrArea	0.34
##	2151	X2ndFlrSF	MasVnrArea	0.17
##	2152	LowQualFinSF	MasVnrArea	-0.07
##	2153	GrLivArea	MasVnrArea	0.39
##	2154	BsmtFullBath	MasVnrArea	0.08
##	2155	BsmtHalfBath	MasVnrArea	0.03
##	2156	FullBath	MasVnrArea	0.27
##	2157	HalfBath	MasVnrArea	0.20
##	2158	BedroomAbvGr	MasVnrArea	0.10
##	2159	KitchenAbvGr	MasVnrArea	-0.04
##	2160	KitchenQual	MasVnrArea	-0.26
##	2161	TotRmsAbvGrd	MasVnrArea	0.28
##	2162	Functional	MasVnrArea	0.09
##	2163	Fireplaces	MasVnrArea	0.25
##	2164	FireplaceQu	MasVnrArea	0.22
##	2165	GarageType	MasVnrArea	-0.12
##	2166	GarageYrBlt	MasVnrArea	0.13
##	2167	GarageFinish	MasVnrArea	-0.15
##	2168	GarageCars	MasVnrArea	0.36
##	2169	GarageArea	MasVnrArea	0.37

##	2170	GarageQual	MasVnrArea	0.16
##	2171	GarageCond	MasVnrArea	0.14
##	2172	PavedDrive	MasVnrArea	0.14
##	2173	WoodDeckSF	MasVnrArea	0.16
##	2174	OpenPorchSF	MasVnrArea	0.12
##	2175	EnclosedPorch	MasVnrArea	-0.11
##	2176	X3SsnPorch	MasVnrArea	0.02
##	2177	ScreenPorch	MasVnrArea	0.06
##	2178	PoolArea	MasVnrArea	0.01
##	2179	PoolQC	MasVnrArea	0.03
##	2180	Fence	MasVnrArea	-0.11
##	2181	MiscFeature	MasVnrArea	-0.05
##	2182	MiscVal	MasVnrArea	-0.03
##	2183	MoSold	MasVnrArea	-0.01
##	2184	YrSold	MasVnrArea	-0.01
##	2185	SaleType	MasVnrArea	-0.06
##	2186	SaleCondition	MasVnrArea	0.09
##	2187	SalePrice	MasVnrArea	0.47
##	2188	Id	ExterQual	0.00
##	2189	MSSubClass	ExterQual	-0.02
##	2190	MSZoning	ExterQual	0.20
##	2191	LotFrontage	ExterQual	-0.15
##	2192	LotArea	ExterQual	-0.06
##	2193	Street	ExterQual	0.05
##	2194	Alley	ExterQual	0.02
##	2195	LotShape	ExterQual	0.15
##	2196	LandContour	ExterQual	0.00
##	2197	Utilities	ExterQual	0.02
##	2198	LotConfig	ExterQual	0.00
##	2199	LandSlope	ExterQual	0.02
##	2200	Neighborhood	ExterQual	-0.11
##	2201	Condition1	ExterQual	-0.07
##	2202	Condition2	ExterQual	-0.03
##	2203	BldgType	ExterQual	-0.09
##	2204	HouseStyle	ExterQual	-0.09
##	2205	OverallQual	ExterQual	-0.63
##	2206	OverallCond	ExterQual	0.17
##	2207	YearBuilt	ExterQual	-0.49
##	2208	YearRemodAdd	ExterQual	-0.48
##	2209	RoofStyle	ExterQual	-0.19
##	2210	RoofMatl	ExterQual	-0.02
##	2211	Exterior1st	ExterQual	-0.14
##	2212	Exterior2nd	ExterQual	-0.11
##	2213	MasVnrType	ExterQual	-0.05
##	2214	MasVnrArea	ExterQual	-0.35
##	2215	ExterQual	ExterQual	1.00
##	2216	ExterCond	ExterQual	-0.06
##	2217	Foundation	ExterQual	-0.41
##	2218	BsmtQual	ExterQual	0.46
##	2219	BsmtCond	ExterQual	-0.04
##	2220	BsmtExposure	ExterQual	0.17
##	2221	BsmtFinType1	ExterQual	-0.06
##	2222	BsmtFinSF1	ExterQual	-0.19
##	2223	BsmtFinType2	ExterQual	-0.10

##	2224	BsmtFinSF2	ExterQual	0.07
##	2225	BsmtUnfSF	ExterQual	-0.27
##	2226	TotalBsmtSF	ExterQual	-0.45
##	2227	Heating	ExterQual	0.05
##	2228	HeatingQC	ExterQual	0.43
##	2229	CentralAir	ExterQual	-0.09
##	2230	Electrical	ExterQual	-0.16
##	2231	X1stFlrSF	ExterQual	-0.38
##	2232	X2ndFlrSF	ExterQual	-0.15
##	2233	LowQualFinSF	ExterQual	0.00
##	2234	GrLivArea	ExterQual	-0.41
##	2235	BsmtFullBath	ExterQual	-0.10
##	2236	BsmtHalfBath	ExterQual	0.06
##	2237	FullBath	ExterQual	-0.41
##	2238	HalfBath	ExterQual	-0.16
##	2239	BedroomAbvGr	ExterQual	0.04
##	2240	KitchenAbvGr	ExterQual	0.10
##	2241	KitchenQual	ExterQual	0.64
##	2242	TotRmsAbvGrd	ExterQual	-0.29
##	2243	Functional	ExterQual	-0.05
##	2244	Fireplaces	ExterQual	-0.22
##	2245	FireplaceQu	ExterQual	-0.17
##	2246	GarageType	ExterQual	0.19
##	2247	GarageYrBlt	ExterQual	-0.12
##	2248	GarageFinish	ExterQual	0.33
##	2249	GarageCars	ExterQual	-0.45
##	2250	GarageArea	ExterQual	-0.44
##	2251	GarageQual	ExterQual	-0.13
##	2252	GarageCond	ExterQual	-0.13
##	2253	PavedDrive	ExterQual	-0.11
##	2254	WoodDeckSF	ExterQual	-0.18
##	2255	OpenPorchSF	ExterQual	-0.27
##	2256	EnclosedPorch	ExterQual	0.12
##	2257	X3SsnPorch	ExterQual	-0.04
##	2258	ScreenPorch	ExterQual	-0.01
##	2259	PoolArea	ExterQual	-0.03
##	2260	PoolQC	ExterQual	-0.04
##	2261	Fence	ExterQual	0.24
##	2262	MiscFeature	ExterQual	0.03
##	2263	MiscVal	ExterQual	0.01
##	2264	MoSold	ExterQual	-0.02
##	2265	YrSold	ExterQual	-0.04
##	2266	SaleType	ExterQual	0.09
##	2267	SaleCondition	ExterQual	-0.19
##	2268	SalePrice	ExterQual	-0.64
##	2269	Id	ExterCond	0.03
##	2270	MSSubClass	ExterCond	0.00
##	2271	MSZoning	ExterCond	-0.10
##	2272	LotFrontage	ExterCond	0.05
##	2273	LotArea	ExterCond	0.02
##	2274	Street	ExterCond	0.01
##	2275	Alley	ExterCond	-0.03
##	2276	LotShape	ExterCond	-0.03
##	2277	LandContour	ExterCond	0.01

##	2278	Utilities	ExterCond	0.01
##	2279	LotConfig	ExterCond	0.03
##	2280	LandSlope	ExterCond	0.00
##	2281	Neighborhood	ExterCond	0.02
##	2282	Condition1	ExterCond	0.08
##	2283	Condition2	ExterCond	-0.02
##	2284	BldgType	ExterCond	0.09
##	2285	HouseStyle	ExterCond	0.07
##	2286	OverallQual	ExterCond	0.14
##	2287	OverallCond	ExterCond	-0.23
##	2288	YearBuilt	ExterCond	0.27
##	2289	YearRemodAdd	ExterCond	0.08
##	2290	RoofStyle	ExterCond	0.03
##	2291	RoofMatl	ExterCond	-0.04
##	2292	Exterior1st	ExterCond	0.02
##	2293	Exterior2nd	ExterCond	0.03
##	2294	MasVnrType	ExterCond	0.00
##	2295	MasVnrArea	ExterCond	0.07
##	2296	ExterQual	ExterCond	-0.06
##	2297	ExterCond	ExterCond	1.00
##	2298	Foundation	ExterCond	0.16
##	2299	BsmtQual	ExterCond	-0.11
##	2300	BsmtCond	ExterCond	0.17
##	2301	BsmtExposure	ExterCond	-0.05
##	2302	BsmtFinType1	ExterCond	0.02
##	2303	BsmtFinSF1	ExterCond	0.04
##	2304	BsmtFinType2	ExterCond	0.03
##	2305	BsmtFinSF2	ExterCond	-0.02
##	2306	BsmtUnfSF	ExterCond	0.08
##	2307	TotalBsmtSF	ExterCond	0.12
##	2308	Heating	ExterCond	-0.03
##	2309	HeatingQC	ExterCond	-0.04
##	2310	CentralAir	ExterCond	0.10
##	2311	Electrical	ExterCond	0.01
##	2312	X1stFlrSF	ExterCond	0.07
##	2313	X2ndFlrSF	ExterCond	0.00
##	2314	LowQualFinSF	ExterCond	-0.07
##	2315	GrLivArea	ExterCond	0.04
##	2316	BsmtFullBath	ExterCond	0.01
##	2317	BsmtHalfBath	ExterCond	-0.06
##	2318	FullBath	ExterCond	0.09
##	2319	HalfBath	ExterCond	0.10
##	2320	BedroomAbvGr	ExterCond	-0.03
##	2321	KitchenAbvGr	ExterCond	-0.01
##	2322	KitchenQual	ExterCond	-0.04
##	2323	TotRmsAbvGrd	ExterCond	0.03
##	2324	Functional	ExterCond	0.04
##	2325	Fireplaces	ExterCond	0.04
##	2326	FireplaceQu	ExterCond	0.05
##	2327	GarageType	ExterCond	-0.05
##	2328	GarageYrBlt	ExterCond	0.13
##	2329	GarageFinish	ExterCond	-0.05
##	2330	GarageCars	ExterCond	0.18
##	2331	GarageArea	ExterCond	0.14

##	2332	GarageQual	ExterCond	0.11
##	2333	GarageCond	ExterCond	0.12
##	2334	PavedDrive	ExterCond	0.14
##	2335	WoodDeckSF	ExterCond	0.02
##	2336	OpenPorchSF	ExterCond	-0.01
##	2337	EnclosedPorch	ExterCond	-0.07
##	2338	X3SsnPorch	ExterCond	0.01
##	2339	ScreenPorch	ExterCond	-0.02
##	2340	PoolArea	ExterCond	-0.03
##	2341	PoolQC	ExterCond	-0.02
##	2342	Fence	ExterCond	-0.09
##	2343	MiscFeature	ExterCond	0.00
##	2344	MiscVal	ExterCond	-0.07
##	2345	MoSold	ExterCond	0.02
##	2346	YrSold	ExterCond	-0.03
##	2347	SaleType	ExterCond	0.01
##	2348	SaleCondition	ExterCond	0.05
##	2349	SalePrice	ExterCond	0.12
##	2350	Id	Foundation	0.01
##	2351	MSSubClass	Foundation	0.06
##	2352	MSZoning	Foundation	-0.24
##	2353	LotFrontage	Foundation	0.05
##	2354	LotArea	Foundation	-0.01
##	2355	Street	Foundation	0.04
##	2356	Alley	Foundation	-0.05
##	2357	LotShape	Foundation	-0.14
##	2358	LandContour	Foundation	0.05
##	2359	Utilities	Foundation	-0.01
##	2360	LotConfig	Foundation	-0.01
##	2361	LandSlope	Foundation	-0.03
##	2362	Neighborhood	Foundation	0.03
##	2363	Condition1	Foundation	0.07
##	2364	Condition2	Foundation	-0.01
##	2365	BldgType	Foundation	0.14
##	2366	HouseStyle	Foundation	0.19
##	2367	OverallQual	Foundation	0.40
##	2368	OverallCond	Foundation	-0.29
##	2369	YearBuilt	Foundation	0.63
##	2370	YearRemodAdd	Foundation	0.44
##	2371	RoofStyle	Foundation	0.02
##	2372	RoofMatl	Foundation	-0.03
##	2373	Exterior1st	Foundation	0.12
##	2374	Exterior2nd	Foundation	0.12
##	2375	MasVnrType	Foundation	0.00
##	2376	MasVnrArea	Foundation	0.17
##	2377	ExterQual	Foundation	-0.41
##	2378	ExterCond	Foundation	0.16
##	2379	Foundation	Foundation	1.00
##	2380	BsmtQual	Foundation	-0.48
##	2381	BsmtCond	Foundation	-0.08
##	2382	BsmtExposure	Foundation	-0.28
##	2383	BsmtFinType1	Foundation	-0.07
##	2384	BsmtFinSF1	Foundation	0.10
##	2385	BsmtFinType2	Foundation	-0.08

##	2386	BsmtFinSF2	Foundation	-0.09
##	2387	BsmtUnfSF	Foundation	0.10
##	2388	TotalBsmtSF	Foundation	0.17
##	2389	Heating	Foundation	-0.04
##	2390	HeatingQC	Foundation	-0.35
##	2391	CentralAir	Foundation	0.17
##	2392	Electrical	Foundation	0.19
##	2393	X1stFlrSF	Foundation	0.19
##	2394	X2ndFlrSF	Foundation	0.11
##	2395	LowQualFinSF	Foundation	-0.09
##	2396	GrLivArea	Foundation	0.22
##	2397	BsmtFullBath	Foundation	0.06
##	2398	BsmtHalfBath	Foundation	-0.06
##	2399	FullBath	Foundation	0.39
##	2400	HalfBath	Foundation	0.14
##	2401	BedroomAbvGr	Foundation	-0.01
##	2402	KitchenAbvGr	Foundation	-0.01
##	2403	KitchenQual	Foundation	-0.32
##	2404	TotRmsAbvGrd	Foundation	0.15
##	2405	Functional	Foundation	0.11
##	2406	Fireplaces	Foundation	0.07
##	2407	FireplaceQu	Foundation	0.10
##	2408	GarageType	Foundation	-0.25
##	2409	GarageYrBlt	Foundation	0.14
##	2410	GarageFinish	Foundation	-0.27
##	2411	GarageCars	Foundation	0.38
##	2412	GarageArea	Foundation	0.33
##	2413	GarageQual	Foundation	0.22
##	2414	GarageCond	Foundation	0.17
##	2415	PavedDrive	Foundation	0.19
##	2416	WoodDeckSF	Foundation	0.14
##	2417	OpenPorchSF	Foundation	0.16
##	2418	EnclosedPorch	Foundation	-0.21
##	2419	X3SsnPorch	Foundation	0.05
##	2420	ScreenPorch	Foundation	-0.07
##	2421	PoolArea	Foundation	0.00
##	2422	PoolQC	Foundation	-0.01
##	2423	Fence	Foundation	-0.20
##	2424	MiscFeature	Foundation	-0.03
##	2425	MiscVal	Foundation	0.00
##	2426	MoSold	Foundation	0.00
##	2427	YrSold	Foundation	0.01
##	2428	SaleType	Foundation	0.01
##	2429	SaleCondition	Foundation	0.14
##	2430	SalePrice	Foundation	0.38
##	2431	Id	BsmtQual	0.05
##	2432	MSSubClass	BsmtQual	-0.05
##	2433	MSZoning	BsmtQual	0.10
##	2434	LotFrontage	BsmtQual	-0.13
##	2435	LotArea	BsmtQual	-0.04
##	2436	Street	BsmtQual	-0.03
##	2437	Alley	BsmtQual	0.05
##	2438	LotShape	BsmtQual	0.09
##	2439	LandContour	BsmtQual	0.00

##	2440	Utilities	BsmtQual	0.02
##	2441	LotConfig	BsmtQual	0.01
##	2442	LandSlope	BsmtQual	0.02
##	2443	Neighborhood	BsmtQual	-0.08
##	2444	Condition1	BsmtQual	-0.08
##	2445	Condition2	BsmtQual	0.01
##	2446	BldgType	BsmtQual	-0.12
##	2447	HouseStyle	BsmtQual	-0.08
##	2448	OverallQual	BsmtQual	-0.39
##	2449	OverallCond	BsmtQual	0.25
##	2450	YearBuilt	BsmtQual	-0.42
##	2451	YearRemodAdd	BsmtQual	-0.32
##	2452	RoofStyle	BsmtQual	-0.11
##	2453	RoofMatl	BsmtQual	-0.02
##	2454	Exterior1st	BsmtQual	-0.09
##	2455	Exterior2nd	BsmtQual	-0.10
##	2456	MasVnrType	BsmtQual	-0.10
##	2457	MasVnrArea	BsmtQual	-0.24
##	2458	ExterQual	BsmtQual	0.46
##	2459	ExterCond	BsmtQual	-0.11
##	2460	Foundation	BsmtQual	-0.48
##	2461	BsmtQual	BsmtQual	1.00
##	2462	BsmtCond	BsmtQual	0.35
##	2463	BsmtExposure	BsmtQual	0.42
##	2464	BsmtFinType1	BsmtQual	0.12
##	2465	BsmtFinSF1	BsmtQual	-0.12
##	2466	BsmtFinType2	BsmtQual	0.29
##	2467	BsmtFinSF2	BsmtQual	0.11
##	2468	BsmtUnfSF	BsmtQual	-0.04
##	2469	TotalBsmtSF	BsmtQual	-0.12
##	2470	Heating	BsmtQual	-0.07
##	2471	HeatingQC	BsmtQual	0.28
##	2472	CentralAir	BsmtQual	0.01
##	2473	Electrical	BsmtQual	-0.05
##	2474	X1stFlrSF	BsmtQual	-0.29
##	2475	X2ndFlrSF	BsmtQual	-0.07
##	2476	LowQualFinSF	BsmtQual	0.07
##	2477	GrLivArea	BsmtQual	-0.27
##	2478	BsmtFullBath	BsmtQual	-0.06
##	2479	BsmtHalfBath	BsmtQual	0.06
##	2480	FullBath	BsmtQual	-0.37
##	2481	HalfBath	BsmtQual	-0.05
##	2482	BedroomAbvGr	BsmtQual	0.08
##	2483	KitchenAbvGr	BsmtQual	-0.07
##	2484	KitchenQual	BsmtQual	0.40
##	2485	TotRmsAbvGrd	BsmtQual	-0.20
##	2486	Functional	BsmtQual	-0.01
##	2487	Fireplaces	BsmtQual	-0.12
##	2488	FireplaceQu	BsmtQual	-0.09
##	2489	GarageType	BsmtQual	0.12
##	2490	GarageYrBlt	BsmtQual	-0.07
##	2491	GarageFinish	BsmtQual	0.25
##	2492	GarageCars	BsmtQual	-0.37
##	2493	GarageArea	BsmtQual	-0.33

## 2494	GarageQual	BsmtQual	-0.07
## 2495	GarageCond	BsmtQual	-0.05
## 2496	PavedDrive	BsmtQual	-0.04
## 2497	WoodDeckSF	BsmtQual	-0.14
## 2498	OpenPorchSF	BsmtQual	-0.16
## 2499	EnclosedPorch	BsmtQual	0.13
## 2500	X3SsnPorch	BsmtQual	-0.02
## 2501	ScreenPorch	BsmtQual	0.02
## 2502	PoolArea	BsmtQual	-0.02
## 2503	PoolQC	BsmtQual	-0.02
## 2504	Fence	BsmtQual	0.20
## 2505	MiscFeature	BsmtQual	0.04
## 2506	MiscVal	BsmtQual	0.01
## 2507	MoSold	BsmtQual	0.00
## 2508	YrSold	BsmtQual	0.00
## 2509	SaleType	BsmtQual	0.04
## 2510	SaleCondition	BsmtQual	-0.15
## 2511	SalePrice	BsmtQual	-0.44
## 2512	Id	BsmtCond	0.01
## 2513	MSSubClass	BsmtCond	-0.02
## 2514	MSZoning	BsmtCond	-0.02
## 2515	LotFrontage	BsmtCond	0.00
## 2516	LotArea	BsmtCond	0.02
## 2517	Street	BsmtCond	-0.02
## 2518	Alley	BsmtCond	-0.04
## 2519	LotShape	BsmtCond	-0.06
## 2520	LandContour	BsmtCond	0.02
## 2521	Utilities	BsmtCond	0.01
## 2522	LotConfig	BsmtCond	0.02
## 2523	LandSlope	BsmtCond	0.02
## 2524	Neighborhood	BsmtCond	0.04
## 2525	Condition1	BsmtCond	0.03
## 2526	Condition2	BsmtCond	0.03
## 2527	BldgType	BsmtCond	-0.01
## 2528	HouseStyle	BsmtCond	0.06
## 2529	OverallQual	BsmtCond	0.19
## 2530	OverallCond	BsmtCond	0.06
## 2531	YearBuilt	BsmtCond	0.17
## 2532	YearRemodAdd	BsmtCond	0.11
## 2533	RoofStyle	BsmtCond	0.00
## 2534	RoofMatl	BsmtCond	-0.02
## 2535	Exterior1st	BsmtCond	0.03
## 2536	Exterior2nd	BsmtCond	0.00
## 2537	MasVnrType	BsmtCond	-0.05
## 2538	MasVnrArea	BsmtCond	0.09
## 2539	ExterQual	BsmtCond	-0.04
## 2540	ExterCond	BsmtCond	0.17
## 2541	Foundation	BsmtCond	-0.08
## 2542	BsmtQual	BsmtCond	0.35
## 2543	BsmtCond	BsmtCond	1.00
## 2544	BsmtExposure	BsmtCond	0.25
## 2545	BsmtFinType1	BsmtCond	0.15
## 2546	BsmtFinSF1	BsmtCond	0.16
## 2547	BsmtFinType2	BsmtCond	0.49

##	2548	BsmtFinSF2	BsmtCond	0.02
##	2549	BsmtUnfSF	BsmtCond	0.13
##	2550	TotalBsmtSF	BsmtCond	0.30
##	2551	Heating	BsmtCond	-0.19
##	2552	HeatingQC	BsmtCond	-0.09
##	2553	CentralAir	BsmtCond	0.25
##	2554	Electrical	BsmtCond	0.17
##	2555	X1stFlrSF	BsmtCond	0.04
##	2556	X2ndFlrSF	BsmtCond	0.01
##	2557	LowQualFinSF	BsmtCond	-0.05
##	2558	GrLivArea	BsmtCond	0.03
##	2559	BsmtFullBath	BsmtCond	0.12
##	2560	BsmtHalfBath	BsmtCond	-0.02
##	2561	FullBath	BsmtCond	0.00
##	2562	HalfBath	BsmtCond	0.13
##	2563	BedroomAbvGr	BsmtCond	-0.02
##	2564	KitchenAbvGr	BsmtCond	-0.20
##	2565	KitchenQual	BsmtCond	-0.04
##	2566	TotRmsAbvGrd	BsmtCond	-0.01
##	2567	Functional	BsmtCond	0.09
##	2568	Fireplaces	BsmtCond	0.08
##	2569	FireplaceQu	BsmtCond	0.08
##	2570	GarageType	BsmtCond	-0.08
##	2571	GarageYrBlt	BsmtCond	0.11
##	2572	GarageFinish	BsmtCond	-0.04
##	2573	GarageCars	BsmtCond	0.10
##	2574	GarageArea	BsmtCond	0.10
##	2575	GarageQual	BsmtCond	0.10
##	2576	GarageCond	BsmtCond	0.15
##	2577	PavedDrive	BsmtCond	0.19
##	2578	WoodDeckSF	BsmtCond	0.07
##	2579	OpenPorchSF	BsmtCond	0.06
##	2580	EnclosedPorch	BsmtCond	-0.04
##	2581	X3SsnPorch	BsmtCond	0.02
##	2582	ScreenPorch	BsmtCond	0.04
##	2583	PoolArea	BsmtCond	0.02
##	2584	PoolQC	BsmtCond	0.02
##	2585	Fence	BsmtCond	0.03
##	2586	MiscFeature	BsmtCond	-0.01
##	2587	MiscVal	BsmtCond	-0.02
##	2588	MoSold	BsmtCond	-0.01
##	2589	YrSold	BsmtCond	0.04
##	2590	SaleType	BsmtCond	0.02
##	2591	SaleCondition	BsmtCond	0.03
##	2592	SalePrice	BsmtCond	0.15
##	2593	Id	BsmtExposure	-0.02
##	2594	MSSubClass	BsmtExposure	-0.07
##	2595	MSZoning	BsmtExposure	0.03
##	2596	LotFrontage	BsmtExposure	-0.05
##	2597	LotArea	BsmtExposure	-0.12
##	2598	Street	BsmtExposure	0.06
##	2599	Alley	BsmtExposure	0.12
##	2600	LotShape	BsmtExposure	0.09
##	2601	LandContour	BsmtExposure	0.04

##	2602	Utilities	BsmtExposure	0.02
##	2603	LotConfig	BsmtExposure	0.01
##	2604	LandSlope	BsmtExposure	-0.14
##	2605	Neighborhood	BsmtExposure	0.08
##	2606	Condition1	BsmtExposure	-0.01
##	2607	Condition2	BsmtExposure	0.01
##	2608	BldgType	BsmtExposure	-0.06
##	2609	HouseStyle	BsmtExposure	-0.14
##	2610	OverallQual	BsmtExposure	-0.12
##	2611	OverallCond	BsmtExposure	0.11
##	2612	YearBuilt	BsmtExposure	-0.24
##	2613	YearRemodAdd	BsmtExposure	-0.13
##	2614	RoofStyle	BsmtExposure	-0.01
##	2615	RoofMatl	BsmtExposure	-0.08
##	2616	Exterior1st	BsmtExposure	-0.02
##	2617	Exterior2nd	BsmtExposure	-0.03
##	2618	MasVnrType	BsmtExposure	-0.04
##	2619	MasVnrArea	BsmtExposure	-0.09
##	2620	ExterQual	BsmtExposure	0.17
##	2621	ExterCond	BsmtExposure	-0.05
##	2622	Foundation	BsmtExposure	-0.28
##	2623	BsmtQual	BsmtExposure	0.42
##	2624	BsmtCond	BsmtExposure	0.25
##	2625	BsmtExposure	BsmtExposure	1.00
##	2626	BsmtFinType1	BsmtExposure	0.27
##	2627	BsmtFinSF1	BsmtExposure	-0.17
##	2628	BsmtFinType2	BsmtExposure	0.32
##	2629	BsmtFinSF2	BsmtExposure	-0.03
##	2630	BsmtUnfSF	BsmtExposure	0.13
##	2631	TotalBsmtSF	BsmtExposure	-0.05
##	2632	Heating	BsmtExposure	-0.05
##	2633	HeatingQC	BsmtExposure	0.07
##	2634	CentralAir	BsmtExposure	0.01
##	2635	Electrical	BsmtExposure	-0.05
##	2636	X1stFlrSF	BsmtExposure	-0.21
##	2637	X2ndFlrSF	BsmtExposure	0.14
##	2638	LowQualFinSF	BsmtExposure	0.06
##	2639	GrLivArea	BsmtExposure	-0.03
##	2640	BsmtFullBath	BsmtExposure	-0.18
##	2641	BsmtHalfBath	BsmtExposure	-0.03
##	2642	FullBath	BsmtExposure	-0.09
##	2643	HalfBath	BsmtExposure	0.12
##	2644	BedroomAbvGr	BsmtExposure	0.11
##	2645	KitchenAbvGr	BsmtExposure	-0.07
##	2646	KitchenQual	BsmtExposure	0.15
##	2647	TotRmsAbvGrd	BsmtExposure	0.00
##	2648	Functional	BsmtExposure	-0.03
##	2649	Fireplaces	BsmtExposure	-0.06
##	2650	FireplaceQu	BsmtExposure	-0.01
##	2651	GarageType	BsmtExposure	0.13
##	2652	GarageYrBlt	BsmtExposure	-0.01
##	2653	GarageFinish	BsmtExposure	0.13
##	2654	GarageCars	BsmtExposure	-0.17
##	2655	GarageArea	BsmtExposure	-0.17

##	2656	GarageQual	BsmtExposure	-0.04
##	2657	GarageCond	BsmtExposure	-0.02
##	2658	PavedDrive	BsmtExposure	-0.02
##	2659	WoodDeckSF	BsmtExposure	-0.15
##	2660	OpenPorchSF	BsmtExposure	-0.01
##	2661	EnclosedPorch	BsmtExposure	0.10
##	2662	X3SsnPorch	BsmtExposure	0.01
##	2663	ScreenPorch	BsmtExposure	0.02
##	2664	PoolArea	BsmtExposure	-0.04
##	2665	PoolQC	BsmtExposure	-0.05
##	2666	Fence	BsmtExposure	0.07
##	2667	MiscFeature	BsmtExposure	0.02
##	2668	MiscVal	BsmtExposure	0.00
##	2669	MoSold	BsmtExposure	-0.01
##	2670	YrSold	BsmtExposure	0.04
##	2671	SaleType	BsmtExposure	-0.01
##	2672	SaleCondition	BsmtExposure	-0.06
##	2673	SalePrice	BsmtExposure	-0.19
##	2674	Id	BsmtFinType1	0.02
##	2675	MSSubClass	BsmtFinType1	0.01
##	2676	MSZoning	BsmtFinType1	0.02
##	2677	LotFrontage	BsmtFinType1	0.07
##	2678	LotArea	BsmtFinType1	-0.05
##	2679	Street	BsmtFinType1	-0.02
##	2680	Alley	BsmtFinType1	0.14
##	2681	LotShape	BsmtFinType1	0.05
##	2682	LandContour	BsmtFinType1	-0.07
##	2683	Utilities	BsmtFinType1	-0.01
##	2684	LotConfig	BsmtFinType1	0.01
##	2685	LandSlope	BsmtFinType1	-0.05
##	2686	Neighborhood	BsmtFinType1	-0.02
##	2687	Condition1	BsmtFinType1	-0.02
##	2688	Condition2	BsmtFinType1	0.02
##	2689	BldgType	BsmtFinType1	-0.07
##	2690	HouseStyle	BsmtFinType1	-0.01
##	2691	OverallQual	BsmtFinType1	0.12
##	2692	OverallCond	BsmtFinType1	-0.04
##	2693	YearBuilt	BsmtFinType1	-0.10
##	2694	YearRemodAdd	BsmtFinType1	0.05
##	2695	RoofStyle	BsmtFinType1	-0.04
##	2696	RoofMatl	BsmtFinType1	-0.03
##	2697	Exterior1st	BsmtFinType1	0.17
##	2698	Exterior2nd	BsmtFinType1	0.15
##	2699	MasVnrType	BsmtFinType1	0.05
##	2700	MasVnrArea	BsmtFinType1	-0.04
##	2701	ExterQual	BsmtFinType1	-0.06
##	2702	ExterCond	BsmtFinType1	0.02
##	2703	Foundation	BsmtFinType1	-0.07
##	2704	BsmtQual	BsmtFinType1	0.12
##	2705	BsmtCond	BsmtFinType1	0.15
##	2706	BsmtExposure	BsmtFinType1	0.27
##	2707	BsmtFinType1	BsmtFinType1	1.00
##	2708	BsmtFinSF1	BsmtFinType1	-0.48
##	2709	BsmtFinType2	BsmtFinType1	0.32

##	2710	BsmtFinSF2	BsmtFinType1	-0.12
##	2711	BsmtUnfSF	BsmtFinType1	0.55
##	2712	TotalBsmtSF	BsmtFinType1	0.01
##	2713	Heating	BsmtFinType1	-0.03
##	2714	HeatingQC	BsmtFinType1	-0.11
##	2715	CentralAir	BsmtFinType1	-0.06
##	2716	Electrical	BsmtFinType1	-0.08
##	2717	X1stFlrSF	BsmtFinType1	-0.09
##	2718	X2ndFlrSF	BsmtFinType1	0.20
##	2719	LowQualFinSF	BsmtFinType1	0.08
##	2720	GrLivArea	BsmtFinType1	0.11
##	2721	BsmtFullBath	BsmtFinType1	-0.40
##	2722	BsmtHalfBath	BsmtFinType1	-0.09
##	2723	FullBath	BsmtFinType1	0.09
##	2724	HalfBath	BsmtFinType1	0.07
##	2725	BedroomAbvGr	BsmtFinType1	0.11
##	2726	KitchenAbvGr	BsmtFinType1	-0.01
##	2727	KitchenQual	BsmtFinType1	-0.05
##	2728	TotRmsAbvGrd	BsmtFinType1	0.14
##	2729	Functional	BsmtFinType1	0.01
##	2730	Fireplaces	BsmtFinType1	-0.06
##	2731	FireplaceQu	BsmtFinType1	-0.04
##	2732	GarageType	BsmtFinType1	0.09
##	2733	GarageYrBlt	BsmtFinType1	-0.03
##	2734	GarageFinish	BsmtFinType1	-0.02
##	2735	GarageCars	BsmtFinType1	0.01
##	2736	GarageArea	BsmtFinType1	-0.02
##	2737	GarageQual	BsmtFinType1	-0.09
##	2738	GarageCond	BsmtFinType1	-0.06
##	2739	PavedDrive	BsmtFinType1	-0.16
##	2740	WoodDeckSF	BsmtFinType1	-0.07
##	2741	OpenPorchSF	BsmtFinType1	0.03
##	2742	EnclosedPorch	BsmtFinType1	0.09
##	2743	X3SsnPorch	BsmtFinType1	-0.05
##	2744	ScreenPorch	BsmtFinType1	-0.01
##	2745	PoolArea	BsmtFinType1	-0.03
##	2746	PoolQC	BsmtFinType1	-0.03
##	2747	Fence	BsmtFinType1	-0.04
##	2748	MiscFeature	BsmtFinType1	-0.06
##	2749	MiscVal	BsmtFinType1	-0.05
##	2750	MoSold	BsmtFinType1	0.04
##	2751	YrSold	BsmtFinType1	-0.05
##	2752	SaleType	BsmtFinType1	-0.06
##	2753	SaleCondition	BsmtFinType1	0.02
##	2754	SalePrice	BsmtFinType1	-0.01
##	2755	Id	BsmtFinSF1	-0.01
##	2756	MSSubClass	BsmtFinSF1	-0.07
##	2757	MSZoning	BsmtFinSF1	-0.05
##	2758	LotFrontage	BsmtFinSF1	0.08
##	2759	LotArea	BsmtFinSF1	0.21
##	2760	Street	BsmtFinSF1	-0.02
##	2761	Alley	BsmtFinSF1	-0.13
##	2762	LotShape	BsmtFinSF1	-0.13
##	2763	LandContour	BsmtFinSF1	-0.02

## 2764	Utilities	BsmtFinSF1	-0.02
## 2765	LotConfig	BsmtFinSF1	-0.02
## 2766	LandSlope	BsmtFinSF1	0.11
## 2767	Neighborhood	BsmtFinSF1	0.10
## 2768	Condition1	BsmtFinSF1	0.03
## 2769	Condition2	BsmtFinSF1	0.01
## 2770	BldgType	BsmtFinSF1	0.01
## 2771	HouseStyle	BsmtFinSF1	0.01
## 2772	OverallQual	BsmtFinSF1	0.24
## 2773	OverallCond	BsmtFinSF1	-0.05
## 2774	YearBuilt	BsmtFinSF1	0.25
## 2775	YearRemodAdd	BsmtFinSF1	0.13
## 2776	RoofStyle	BsmtFinSF1	0.19
## 2777	RoofMatl	BsmtFinSF1	0.04
## 2778	Exterior1st	BsmtFinSF1	-0.07
## 2779	Exterior2nd	BsmtFinSF1	-0.08
## 2780	MasVnrType	BsmtFinSF1	-0.02
## 2781	MasVnrArea	BsmtFinSF1	0.26
## 2782	ExterQual	BsmtFinSF1	-0.19
## 2783	ExterCond	BsmtFinSF1	0.04
## 2784	Foundation	BsmtFinSF1	0.10
## 2785	BsmtQual	BsmtFinSF1	-0.12
## 2786	BsmtCond	BsmtFinSF1	0.16
## 2787	BsmtExposure	BsmtFinSF1	-0.17
## 2788	BsmtFinType1	BsmtFinSF1	-0.48
## 2789	BsmtFinSF1	BsmtFinSF1	1.00
## 2790	BsmtFinType2	BsmtFinSF1	0.12
## 2791	BsmtFinSF2	BsmtFinSF1	-0.05
## 2792	BsmtUnfSF	BsmtFinSF1	-0.50
## 2793	TotalBsmtSF	BsmtFinSF1	0.52
## 2794	Heating	BsmtFinSF1	-0.07
## 2795	HeatingQC	BsmtFinSF1	-0.05
## 2796	CentralAir	BsmtFinSF1	0.17
## 2797	Electrical	BsmtFinSF1	0.15
## 2798	X1stFlrSF	BsmtFinSF1	0.45
## 2799	X2ndFlrSF	BsmtFinSF1	-0.14
## 2800	LowQualFinSF	BsmtFinSF1	-0.06
## 2801	GrLivArea	BsmtFinSF1	0.21
## 2802	BsmtFullBath	BsmtFinSF1	0.65
## 2803	BsmtHalfBath	BsmtFinSF1	0.07
## 2804	FullBath	BsmtFinSF1	0.06
## 2805	HalfBath	BsmtFinSF1	0.00
## 2806	BedroomAbvGr	BsmtFinSF1	-0.11
## 2807	KitchenAbvGr	BsmtFinSF1	-0.08
## 2808	KitchenQual	BsmtFinSF1	-0.19
## 2809	TotRmsAbvGrd	BsmtFinSF1	0.04
## 2810	Functional	BsmtFinSF1	0.04
## 2811	Fireplaces	BsmtFinSF1	0.26
## 2812	FireplaceQu	BsmtFinSF1	0.15
## 2813	GarageType	BsmtFinSF1	-0.19
## 2814	GarageYrBltd	BsmtFinSF1	0.12
## 2815	GarageFinish	BsmtFinSF1	-0.13
## 2816	GarageCars	BsmtFinSF1	0.22
## 2817	GarageArea	BsmtFinSF1	0.30

##	2818	GarageQual	BsmtFinSF1	0.16
##	2819	GarageCond	BsmtFinSF1	0.14
##	2820	PavedDrive	BsmtFinSF1	0.19
##	2821	WoodDeckSF	BsmtFinSF1	0.20
##	2822	OpenPorchSF	BsmtFinSF1	0.11
##	2823	EnclosedPorch	BsmtFinSF1	-0.10
##	2824	X3SsnPorch	BsmtFinSF1	0.03
##	2825	ScreenPorch	BsmtFinSF1	0.06
##	2826	PoolArea	BsmtFinSF1	0.14
##	2827	PoolQC	BsmtFinSF1	0.17
##	2828	Fence	BsmtFinSF1	-0.01
##	2829	MiscFeature	BsmtFinSF1	-0.01
##	2830	MiscVal	BsmtFinSF1	0.00
##	2831	MoSold	BsmtFinSF1	-0.02
##	2832	YrSold	BsmtFinSF1	0.01
##	2833	SaleType	BsmtFinSF1	0.01
##	2834	SaleCondition	BsmtFinSF1	0.03
##	2835	SalePrice	BsmtFinSF1	0.39
##	2836	Id	BsmtFinType2	0.04
##	2837	MSSubClass	BsmtFinType2	0.02
##	2838	MSZoning	BsmtFinType2	-0.03
##	2839	LotFrontage	BsmtFinType2	0.02
##	2840	LotArea	BsmtFinType2	-0.03
##	2841	Street	BsmtFinType2	0.04
##	2842	Alley	BsmtFinType2	0.06
##	2843	LotShape	BsmtFinType2	-0.03
##	2844	LandContour	BsmtFinType2	-0.02
##	2845	Utilities	BsmtFinType2	-0.01
##	2846	LotConfig	BsmtFinType2	-0.01
##	2847	LandSlope	BsmtFinType2	-0.03
##	2848	Neighborhood	BsmtFinType2	0.00
##	2849	Condition1	BsmtFinType2	0.00
##	2850	Condition2	BsmtFinType2	-0.01
##	2851	BldgType	BsmtFinType2	-0.01
##	2852	HouseStyle	BsmtFinType2	0.06
##	2853	OverallQual	BsmtFinType2	0.21
##	2854	OverallCond	BsmtFinType2	-0.01
##	2855	YearBuilt	BsmtFinType2	0.09
##	2856	YearRemodAdd	BsmtFinType2	0.15
##	2857	RoofStyle	BsmtFinType2	0.02
##	2858	RoofMatl	BsmtFinType2	-0.02
##	2859	Exterior1st	BsmtFinType2	0.09
##	2860	Exterior2nd	BsmtFinType2	0.05
##	2861	MasVnrType	BsmtFinType2	-0.01
##	2862	MasVnrArea	BsmtFinType2	0.07
##	2863	ExterQual	BsmtFinType2	-0.10
##	2864	ExterCond	BsmtFinType2	0.03
##	2865	Foundation	BsmtFinType2	-0.08
##	2866	BsmtQual	BsmtFinType2	0.29
##	2867	BsmtCond	BsmtFinType2	0.49
##	2868	BsmtExposure	BsmtFinType2	0.32
##	2869	BsmtFinType1	BsmtFinType2	0.32
##	2870	BsmtFinSF1	BsmtFinType2	0.12
##	2871	BsmtFinType2	BsmtFinType2	1.00

##	2872	BsmtFinSF2	BsmtFinType2	-0.50
##	2873	BsmtUnfSF	BsmtFinType2	0.29
##	2874	TotalBsmtSF	BsmtFinType2	0.23
##	2875	Heating	BsmtFinType2	-0.14
##	2876	HeatingQC	BsmtFinType2	-0.12
##	2877	CentralAir	BsmtFinType2	0.11
##	2878	Electrical	BsmtFinType2	0.08
##	2879	X1stFlrSF	BsmtFinType2	-0.01
##	2880	X2ndFlrSF	BsmtFinType2	0.10
##	2881	LowQualFinSF	BsmtFinType2	-0.01
##	2882	GrLivArea	BsmtFinType2	0.07
##	2883	BsmtFullBath	BsmtFinType2	-0.01
##	2884	BsmtHalfBath	BsmtFinType2	-0.04
##	2885	FullBath	BsmtFinType2	0.05
##	2886	HalfBath	BsmtFinType2	0.13
##	2887	BedroomAbvGr	BsmtFinType2	0.01
##	2888	KitchenAbvGr	BsmtFinType2	-0.17
##	2889	KitchenQual	BsmtFinType2	-0.09
##	2890	TotRmsAbvGrd	BsmtFinType2	0.03
##	2891	Functional	BsmtFinType2	0.13
##	2892	Fireplaces	BsmtFinType2	0.04
##	2893	FireplaceQu	BsmtFinType2	0.05
##	2894	GarageType	BsmtFinType2	-0.04
##	2895	GarageYrBlt	BsmtFinType2	0.05
##	2896	GarageFinish	BsmtFinType2	-0.06
##	2897	GarageCars	BsmtFinType2	0.08
##	2898	GarageArea	BsmtFinType2	0.06
##	2899	GarageQual	BsmtFinType2	0.01
##	2900	GarageCond	BsmtFinType2	0.04
##	2901	PavedDrive	BsmtFinType2	0.05
##	2902	WoodDeckSF	BsmtFinType2	0.02
##	2903	OpenPorchSF	BsmtFinType2	0.08
##	2904	EnclosedPorch	BsmtFinType2	-0.03
##	2905	X3SsnPorch	BsmtFinType2	0.00
##	2906	ScreenPorch	BsmtFinType2	0.01
##	2907	PoolArea	BsmtFinType2	-0.02
##	2908	PoolQC	BsmtFinType2	-0.01
##	2909	Fence	BsmtFinType2	-0.09
##	2910	MiscFeature	BsmtFinType2	-0.05
##	2911	MiscVal	BsmtFinType2	-0.03
##	2912	MoSold	BsmtFinType2	0.02
##	2913	YrSold	BsmtFinType2	-0.05
##	2914	SaleType	BsmtFinType2	-0.03
##	2915	SaleCondition	BsmtFinType2	0.04
##	2916	SalePrice	BsmtFinType2	0.13
##	2917	Id	BsmtFinSF2	-0.01
##	2918	MSSubClass	BsmtFinSF2	-0.07
##	2919	MSZoning	BsmtFinSF2	0.03
##	2920	LotFrontage	BsmtFinSF2	-0.01
##	2921	LotArea	BsmtFinSF2	0.11
##	2922	Street	BsmtFinSF2	-0.04
##	2923	Alley	BsmtFinSF2	-0.05
##	2924	LotShape	BsmtFinSF2	-0.04
##	2925	LandContour	BsmtFinSF2	0.01

##	2926	Utilities	BsmtFinSF2	0.05
##	2927	LotConfig	BsmtFinSF2	-0.01
##	2928	LandSlope	BsmtFinSF2	0.09
##	2929	Neighborhood	BsmtFinSF2	0.05
##	2930	Condition1	BsmtFinSF2	0.03
##	2931	Condition2	BsmtFinSF2	0.05
##	2932	BldgType	BsmtFinSF2	-0.02
##	2933	HouseStyle	BsmtFinSF2	-0.03
##	2934	OverallQual	BsmtFinSF2	-0.06
##	2935	OverallCond	BsmtFinSF2	0.04
##	2936	YearBuilt	BsmtFinSF2	-0.05
##	2937	YearRemodAdd	BsmtFinSF2	-0.07
##	2938	RoofStyle	BsmtFinSF2	0.01
##	2939	RoofMatl	BsmtFinSF2	0.07
##	2940	Exterior1st	BsmtFinSF2	-0.05
##	2941	Exterior2nd	BsmtFinSF2	-0.04
##	2942	MasVnrType	BsmtFinSF2	-0.02
##	2943	MasVnrArea	BsmtFinSF2	-0.07
##	2944	ExterQual	BsmtFinSF2	0.07
##	2945	ExterCond	BsmtFinSF2	-0.02
##	2946	Foundation	BsmtFinSF2	-0.09
##	2947	BsmtQual	BsmtFinSF2	0.11
##	2948	BsmtCond	BsmtFinSF2	0.02
##	2949	BsmtExposure	BsmtFinSF2	-0.03
##	2950	BsmtFinType1	BsmtFinSF2	-0.12
##	2951	BsmtFinSF1	BsmtFinSF2	-0.05
##	2952	BsmtFinType2	BsmtFinSF2	-0.50
##	2953	BsmtFinSF2	BsmtFinSF2	1.00
##	2954	BsmtUnfSF	BsmtFinSF2	-0.21
##	2955	TotalBsmtSF	BsmtFinSF2	0.10
##	2956	Heating	BsmtFinSF2	-0.01
##	2957	HeatingQC	BsmtFinSF2	0.10
##	2958	CentralAir	BsmtFinSF2	0.04
##	2959	Electrical	BsmtFinSF2	0.02
##	2960	X1stFlrSF	BsmtFinSF2	0.10
##	2961	X2ndFlrSF	BsmtFinSF2	-0.10
##	2962	LowQualFinSF	BsmtFinSF2	0.01
##	2963	GrLivArea	BsmtFinSF2	-0.01
##	2964	BsmtFullBath	BsmtFinSF2	0.16
##	2965	BsmtHalfBath	BsmtFinSF2	0.07
##	2966	FullBath	BsmtFinSF2	-0.08
##	2967	HalfBath	BsmtFinSF2	-0.03
##	2968	BedroomAbvGr	BsmtFinSF2	-0.02
##	2969	KitchenAbvGr	BsmtFinSF2	-0.04
##	2970	KitchenQual	BsmtFinSF2	0.06
##	2971	TotRmsAbvGrd	BsmtFinSF2	-0.04
##	2972	Functional	BsmtFinSF2	-0.10
##	2973	Fireplaces	BsmtFinSF2	0.05
##	2974	FireplaceQu	BsmtFinSF2	0.04
##	2975	GarageType	BsmtFinSF2	-0.02
##	2976	GarageYrBlt	BsmtFinSF2	0.04
##	2977	GarageFinish	BsmtFinSF2	0.05
##	2978	GarageCars	BsmtFinSF2	-0.04
##	2979	GarageArea	BsmtFinSF2	-0.02

## 2980	GarageQual	BsmtFinSF2	0.06
## 2981	GarageCond	BsmtFinSF2	0.04
## 2982	PavedDrive	BsmtFinSF2	0.06
## 2983	WoodDeckSF	BsmtFinSF2	0.07
## 2984	OpenPorchSF	BsmtFinSF2	0.00
## 2985	EnclosedPorch	BsmtFinSF2	0.04
## 2986	X3SsnPorch	BsmtFinSF2	-0.03
## 2987	ScreenPorch	BsmtFinSF2	0.09
## 2988	PoolArea	BsmtFinSF2	0.04
## 2989	PoolQC	BsmtFinSF2	0.03
## 2990	Fence	BsmtFinSF2	0.11
## 2991	MiscFeature	BsmtFinSF2	-0.01
## 2992	MiscVal	BsmtFinSF2	0.00
## 2993	MoSold	BsmtFinSF2	-0.02
## 2994	YrSold	BsmtFinSF2	0.03
## 2995	SaleType	BsmtFinSF2	-0.02
## 2996	SaleCondition	BsmtFinSF2	-0.06
## 2997	SalePrice	BsmtFinSF2	-0.01
## 2998	Id	BsmtUnfSF	-0.01
## 2999	MSSubClass	BsmtUnfSF	-0.14
## 3000	MSZoning	BsmtUnfSF	-0.05
## 3001	LotFrontage	BsmtUnfSF	0.16
## 3002	LotArea	BsmtUnfSF	0.00
## 3003	Street	BsmtUnfSF	0.04
## 3004	Alley	BsmtUnfSF	0.04
## 3005	LotShape	BsmtUnfSF	-0.02
## 3006	LandContour	BsmtUnfSF	0.02
## 3007	Utilities	BsmtUnfSF	-0.01
## 3008	LotConfig	BsmtUnfSF	-0.01
## 3009	LandSlope	BsmtUnfSF	-0.12
## 3010	Neighborhood	BsmtUnfSF	0.01
## 3011	Condition1	BsmtUnfSF	0.01
## 3012	Condition2	BsmtUnfSF	0.02
## 3013	BldgType	BsmtUnfSF	-0.05
## 3014	HouseStyle	BsmtUnfSF	-0.14
## 3015	OverallQual	BsmtUnfSF	0.31
## 3016	OverallCond	BsmtUnfSF	-0.14
## 3017	YearBuilt	BsmtUnfSF	0.15
## 3018	YearRemodAdd	BsmtUnfSF	0.18
## 3019	RoofStyle	BsmtUnfSF	0.05
## 3020	RoofMatl	BsmtUnfSF	0.00
## 3021	Exterior1st	BsmtUnfSF	0.13
## 3022	Exterior2nd	BsmtUnfSF	0.13
## 3023	MasVnrType	BsmtUnfSF	0.02
## 3024	MasVnrArea	BsmtUnfSF	0.11
## 3025	ExterQual	BsmtUnfSF	-0.27
## 3026	ExterCond	BsmtUnfSF	0.08
## 3027	Foundation	BsmtUnfSF	0.10
## 3028	BsmtQual	BsmtUnfSF	-0.04
## 3029	BsmtCond	BsmtUnfSF	0.13
## 3030	BsmtExposure	BsmtUnfSF	0.13
## 3031	BsmtFinType1	BsmtUnfSF	0.55
## 3032	BsmtFinSF1	BsmtUnfSF	-0.50
## 3033	BsmtFinType2	BsmtUnfSF	0.29

## 3034	BsmtFinSF2	BsmtUnfSF	-0.21
## 3035	BsmtUnfSF	BsmtUnfSF	1.00
## 3036	TotalBsmtSF	BsmtUnfSF	0.42
## 3037	Heating	BsmtUnfSF	-0.05
## 3038	HeatingQC	BsmtUnfSF	-0.21
## 3039	CentralAir	BsmtUnfSF	0.02
## 3040	Electrical	BsmtUnfSF	0.00
## 3041	X1stFlrSF	BsmtUnfSF	0.32
## 3042	X2ndFlrSF	BsmtUnfSF	0.00
## 3043	LowQualFinSF	BsmtUnfSF	0.03
## 3044	GrLivArea	BsmtUnfSF	0.24
## 3045	BsmtFullBath	BsmtUnfSF	-0.42
## 3046	BsmtHalfBath	BsmtUnfSF	-0.10
## 3047	FullBath	BsmtUnfSF	0.29
## 3048	HalfBath	BsmtUnfSF	-0.04
## 3049	BedroomAbvGr	BsmtUnfSF	0.17
## 3050	KitchenAbvGr	BsmtUnfSF	0.03
## 3051	KitchenQual	BsmtUnfSF	-0.20
## 3052	TotRmsAbvGrd	BsmtUnfSF	0.25
## 3053	Functional	BsmtUnfSF	0.05
## 3054	Fireplaces	BsmtUnfSF	0.05
## 3055	FireplaceQu	BsmtUnfSF	0.05
## 3056	GarageType	BsmtUnfSF	-0.06
## 3057	GarageYrBlt	BsmtUnfSF	0.04
## 3058	GarageFinish	BsmtUnfSF	-0.08
## 3059	GarageCars	BsmtUnfSF	0.21
## 3060	GarageArea	BsmtUnfSF	0.18
## 3061	GarageQual	BsmtUnfSF	0.00
## 3062	GarageCond	BsmtUnfSF	0.03
## 3063	PavedDrive	BsmtUnfSF	-0.01
## 3064	WoodDeckSF	BsmtUnfSF	-0.01
## 3065	OpenPorchSF	BsmtUnfSF	0.13
## 3066	EnclosedPorch	BsmtUnfSF	0.00
## 3067	X3SsnPorch	BsmtUnfSF	0.02
## 3068	ScreenPorch	BsmtUnfSF	-0.01
## 3069	PoolArea	BsmtUnfSF	-0.04
## 3070	PoolQC	BsmtUnfSF	-0.03
## 3071	Fence	BsmtUnfSF	-0.14
## 3072	MiscFeature	BsmtUnfSF	-0.05
## 3073	MiscVal	BsmtUnfSF	-0.02
## 3074	MoSold	BsmtUnfSF	0.03
## 3075	YrSold	BsmtUnfSF	-0.04
## 3076	SaleType	BsmtUnfSF	-0.09
## 3077	SaleCondition	BsmtUnfSF	0.10
## 3078	SalePrice	BsmtUnfSF	0.21
## 3079	Id	TotalBsmtSF	-0.02
## 3080	MSSubClass	TotalBsmtSF	-0.24
## 3081	MSZoning	TotalBsmtSF	-0.09
## 3082	LotFrontage	TotalBsmtSF	0.24
## 3083	LotArea	TotalBsmtSF	0.26
## 3084	Street	TotalBsmtSF	0.01
## 3085	Alley	TotalBsmtSF	-0.11
## 3086	LotShape	TotalBsmtSF	-0.18
## 3087	LandContour	TotalBsmtSF	0.01

## 3088	Utilities	TotalBsmtSF	-0.01
## 3089	LotConfig	TotalBsmtSF	-0.04
## 3090	LandSlope	TotalBsmtSF	0.03
## 3091	Neighborhood	TotalBsmtSF	0.13
## 3092	Condition1	TotalBsmtSF	0.06
## 3093	Condition2	TotalBsmtSF	0.05
## 3094	BldgType	TotalBsmtSF	-0.05
## 3095	HouseStyle	TotalBsmtSF	-0.14
## 3096	OverallQual	TotalBsmtSF	0.54
## 3097	OverallCond	TotalBsmtSF	-0.17
## 3098	YearBuilt	TotalBsmtSF	0.39
## 3099	YearRemodAdd	TotalBsmtSF	0.29
## 3100	RoofStyle	TotalBsmtSF	0.25
## 3101	RoofMatl	TotalBsmtSF	0.07
## 3102	Exterior1st	TotalBsmtSF	0.05
## 3103	Exterior2nd	TotalBsmtSF	0.04
## 3104	MasVnrType	TotalBsmtSF	-0.01
## 3105	MasVnrArea	TotalBsmtSF	0.36
## 3106	ExterQual	TotalBsmtSF	-0.45
## 3107	ExterCond	TotalBsmtSF	0.12
## 3108	Foundation	TotalBsmtSF	0.17
## 3109	BsmtQual	TotalBsmtSF	-0.12
## 3110	BsmtCond	TotalBsmtSF	0.30
## 3111	BsmtExposure	TotalBsmtSF	-0.05
## 3112	BsmtFinType1	TotalBsmtSF	0.01
## 3113	BsmtFinSF1	TotalBsmtSF	0.52
## 3114	BsmtFinType2	TotalBsmtSF	0.23
## 3115	BsmtFinSF2	TotalBsmtSF	0.10
## 3116	BsmtUnfSF	TotalBsmtSF	0.42
## 3117	TotalBsmtSF	TotalBsmtSF	1.00
## 3118	Heating	TotalBsmtSF	-0.13
## 3119	HeatingQC	TotalBsmtSF	-0.23
## 3120	CentralAir	TotalBsmtSF	0.21
## 3121	Electrical	TotalBsmtSF	0.17
## 3122	X1stFlrSF	TotalBsmtSF	0.82
## 3123	X2ndFlrSF	TotalBsmtSF	-0.17
## 3124	LowQualFinSF	TotalBsmtSF	-0.03
## 3125	GrLivArea	TotalBsmtSF	0.45
## 3126	BsmtFullBath	TotalBsmtSF	0.31
## 3127	BsmtHalfBath	TotalBsmtSF	0.00
## 3128	FullBath	TotalBsmtSF	0.32
## 3129	HalfBath	TotalBsmtSF	-0.05
## 3130	BedroomAbvGr	TotalBsmtSF	0.05
## 3131	KitchenAbvGr	TotalBsmtSF	-0.07
## 3132	KitchenQual	TotalBsmtSF	-0.38
## 3133	TotRmsAbvGrd	TotalBsmtSF	0.29
## 3134	Functional	TotalBsmtSF	0.06
## 3135	Fireplaces	TotalBsmtSF	0.34
## 3136	FireplaceQu	TotalBsmtSF	0.23
## 3137	GarageType	TotalBsmtSF	-0.27
## 3138	GarageYrBlt	TotalBsmtSF	0.18
## 3139	GarageFinish	TotalBsmtSF	-0.20
## 3140	GarageCars	TotalBsmtSF	0.43
## 3141	GarageArea	TotalBsmtSF	0.49

## 3142	GarageQual	TotalBsmtSF	0.19
## 3143	GarageCond	TotalBsmtSF	0.19
## 3144	PavedDrive	TotalBsmtSF	0.21
## 3145	WoodDeckSF	TotalBsmtSF	0.23
## 3146	OpenPorchSF	TotalBsmtSF	0.25
## 3147	EnclosedPorch	TotalBsmtSF	-0.10
## 3148	X3SsnPorch	TotalBsmtSF	0.04
## 3149	ScreenPorch	TotalBsmtSF	0.08
## 3150	PoolArea	TotalBsmtSF	0.13
## 3151	PoolQC	TotalBsmtSF	0.16
## 3152	Fence	TotalBsmtSF	-0.11
## 3153	MiscFeature	TotalBsmtSF	-0.07
## 3154	MiscVal	TotalBsmtSF	-0.02
## 3155	MoSold	TotalBsmtSF	0.01
## 3156	YrSold	TotalBsmtSF	-0.01
## 3157	SaleType	TotalBsmtSF	-0.09
## 3158	SaleCondition	TotalBsmtSF	0.11
## 3159	SalePrice	TotalBsmtSF	0.61
## 3160	Id	Heating	0.04
## 3161	MSSubClass	Heating	0.05
## 3162	MSZoning	Heating	0.06
## 3163	LotFrontage	Heating	0.01
## 3164	LotArea	Heating	0.03
## 3165	Street	Heating	0.01
## 3166	Alley	Heating	0.08
## 3167	LotShape	Heating	0.08
## 3168	LandContour	Heating	0.02
## 3169	Utilities	Heating	0.00
## 3170	LotConfig	Heating	0.00
## 3171	LandSlope	Heating	0.01
## 3172	Neighborhood	Heating	-0.01
## 3173	Condition1	Heating	-0.02
## 3174	Condition2	Heating	0.00
## 3175	BldgType	Heating	0.01
## 3176	HouseStyle	Heating	-0.08
## 3177	OverallQual	Heating	-0.11
## 3178	OverallCond	Heating	-0.09
## 3179	YearBuilt	Heating	-0.17
## 3180	YearRemodAdd	Heating	-0.16
## 3181	RoofStyle	Heating	-0.04
## 3182	RoofMatl	Heating	0.00
## 3183	Exterior1st	Heating	-0.07
## 3184	Exterior2nd	Heating	-0.03
## 3185	MasVnrType	Heating	0.03
## 3186	MasVnrArea	Heating	-0.05
## 3187	ExterQual	Heating	0.05
## 3188	ExterCond	Heating	-0.03
## 3189	Foundation	Heating	-0.04
## 3190	BsmtQual	Heating	-0.07
## 3191	BsmtCond	Heating	-0.19
## 3192	BsmtExposure	Heating	-0.05
## 3193	BsmtFinType1	Heating	-0.03
## 3194	BsmtFinSF1	Heating	-0.07
## 3195	BsmtFinType2	Heating	-0.14

## 3196	BsmtFinSF2	Heating	-0.01
## 3197	BsmtUnfSF	Heating	-0.05
## 3198	TotalBsmtSF	Heating	-0.13
## 3199	Heating	Heating	1.00
## 3200	HeatingQC	Heating	0.02
## 3201	CentralAir	Heating	-0.41
## 3202	Electrical	Heating	-0.20
## 3203	X1stFlrSF	Heating	-0.05
## 3204	X2ndFlrSF	Heating	0.02
## 3205	LowQualFinSF	Heating	0.01
## 3206	GrLivArea	Heating	-0.02
## 3207	BsmtFullBath	Heating	-0.06
## 3208	BsmtHalfBath	Heating	-0.01
## 3209	FullBath	Heating	0.00
## 3210	HalfBath	Heating	-0.05
## 3211	BedroomAbvGr	Heating	-0.02
## 3212	KitchenAbvGr	Heating	0.12
## 3213	KitchenQual	Heating	0.02
## 3214	TotRmsAbvGrd	Heating	0.00
## 3215	Functional	Heating	-0.05
## 3216	Fireplaces	Heating	-0.05
## 3217	FireplaceQu	Heating	-0.06
## 3218	GarageType	Heating	0.08
## 3219	GarageYrBlt	Heating	-0.10
## 3220	GarageFinish	Heating	0.03
## 3221	GarageCars	Heating	-0.07
## 3222	GarageArea	Heating	-0.09
## 3223	GarageQual	Heating	-0.12
## 3224	GarageCond	Heating	-0.11
## 3225	PavedDrive	Heating	-0.14
## 3226	WoodDeckSF	Heating	-0.08
## 3227	OpenPorchSF	Heating	-0.03
## 3228	EnclosedPorch	Heating	0.07
## 3229	X3SsnPorch	Heating	-0.01
## 3230	ScreenPorch	Heating	0.00
## 3231	PoolArea	Heating	-0.01
## 3232	PoolQC	Heating	-0.01
## 3233	Fence	Heating	0.00
## 3234	MiscFeature	Heating	-0.01
## 3235	MiscVal	Heating	-0.01
## 3236	MoSold	Heating	-0.01
## 3237	YrSold	Heating	0.01
## 3238	SaleType	Heating	0.01
## 3239	SaleCondition	Heating	0.01
## 3240	SalePrice	Heating	-0.10
## 3241	Id	HeatingQC	0.00
## 3242	MSSubClass	HeatingQC	0.02
## 3243	MSZoning	HeatingQC	0.13
## 3244	LotFrontage	HeatingQC	-0.10
## 3245	LotArea	HeatingQC	0.00
## 3246	Street	HeatingQC	-0.05
## 3247	Alley	HeatingQC	-0.04
## 3248	LotShape	HeatingQC	0.10
## 3249	LandContour	HeatingQC	-0.07

##	3250	Utilities	HeatingQC	0.01
##	3251	LotConfig	HeatingQC	-0.01
##	3252	LandSlope	HeatingQC	0.04
##	3253	Neighborhood	HeatingQC	-0.01
##	3254	Condition1	HeatingQC	-0.08
##	3255	Condition2	HeatingQC	-0.02
##	3256	BldgType	HeatingQC	-0.01
##	3257	HouseStyle	HeatingQC	-0.07
##	3258	OverallQual	HeatingQC	-0.43
##	3259	OverallCond	HeatingQC	0.05
##	3260	YearBuilt	HeatingQC	-0.40
##	3261	YearRemodAdd	HeatingQC	-0.50
##	3262	RoofStyle	HeatingQC	-0.02
##	3263	RoofMatl	HeatingQC	0.06
##	3264	Exterior1st	HeatingQC	-0.25
##	3265	Exterior2nd	HeatingQC	-0.24
##	3266	MasVnrType	HeatingQC	-0.06
##	3267	MasVnrArea	HeatingQC	-0.14
##	3268	ExterQual	HeatingQC	0.43
##	3269	ExterCond	HeatingQC	-0.04
##	3270	Foundation	HeatingQC	-0.35
##	3271	BsmtQual	HeatingQC	0.28
##	3272	BsmtCond	HeatingQC	-0.09
##	3273	BsmtExposure	HeatingQC	0.07
##	3274	BsmtFinType1	HeatingQC	-0.11
##	3275	BsmtFinSF1	HeatingQC	-0.05
##	3276	BsmtFinType2	HeatingQC	-0.12
##	3277	BsmtFinSF2	HeatingQC	0.10
##	3278	BsmtUnfSF	HeatingQC	-0.21
##	3279	TotalBsmtSF	HeatingQC	-0.23
##	3280	Heating	HeatingQC	0.02
##	3281	HeatingQC	HeatingQC	1.00
##	3282	CentralAir	HeatingQC	-0.16
##	3283	Electrical	HeatingQC	-0.14
##	3284	X1stFlrSF	HeatingQC	-0.17
##	3285	X2ndFlrSF	HeatingQC	-0.14
##	3286	LowQualFinSF	HeatingQC	0.02
##	3287	GrLivArea	HeatingQC	-0.24
##	3288	BsmtFullBath	HeatingQC	-0.06
##	3289	BsmtHalfBath	HeatingQC	0.04
##	3290	FullBath	HeatingQC	-0.32
##	3291	HalfBath	HeatingQC	-0.10
##	3292	BedroomAbvGr	HeatingQC	0.05
##	3293	KitchenAbvGr	HeatingQC	0.16
##	3294	KitchenQual	HeatingQC	0.39
##	3295	TotRmsAbvGrd	HeatingQC	-0.16
##	3296	Functional	HeatingQC	-0.07
##	3297	Fireplaces	HeatingQC	-0.12
##	3298	FireplaceQu	HeatingQC	-0.10
##	3299	GarageType	HeatingQC	0.13
##	3300	GarageYrBlt	HeatingQC	-0.11
##	3301	GarageFinish	HeatingQC	0.27
##	3302	GarageCars	HeatingQC	-0.30
##	3303	GarageArea	HeatingQC	-0.26

##	3304	GarageQual	HeatingQC	-0.09
##	3305	GarageCond	HeatingQC	-0.10
##	3306	PavedDrive	HeatingQC	-0.10
##	3307	WoodDeckSF	HeatingQC	-0.11
##	3308	OpenPorchSF	HeatingQC	-0.17
##	3309	EnclosedPorch	HeatingQC	0.09
##	3310	X3SsnPorch	HeatingQC	-0.05
##	3311	ScreenPorch	HeatingQC	0.06
##	3312	PoolArea	HeatingQC	0.03
##	3313	PoolQC	HeatingQC	0.03
##	3314	Fence	HeatingQC	0.22
##	3315	MiscFeature	HeatingQC	0.03
##	3316	MiscVal	HeatingQC	0.02
##	3317	MoSold	HeatingQC	0.00
##	3318	YrSold	HeatingQC	0.01
##	3319	SaleType	HeatingQC	-0.02
##	3320	SaleCondition	HeatingQC	-0.17
##	3321	SalePrice	HeatingQC	-0.40
##	3322	Id	CentralAir	0.01
##	3323	MSSubClass	CentralAir	-0.10
##	3324	MSZoning	CentralAir	-0.05
##	3325	LotFrontage	CentralAir	-0.01
##	3326	LotArea	CentralAir	0.05
##	3327	Street	CentralAir	0.07
##	3328	Alley	CentralAir	-0.14
##	3329	LotShape	CentralAir	-0.12
##	3330	LandContour	CentralAir	0.11
##	3331	Utilities	CentralAir	0.01
##	3332	LotConfig	CentralAir	0.00
##	3333	LandSlope	CentralAir	-0.01
##	3334	Neighborhood	CentralAir	0.03
##	3335	Condition1	CentralAir	0.01
##	3336	Condition2	CentralAir	-0.02
##	3337	BldgType	CentralAir	0.02
##	3338	HouseStyle	CentralAir	0.08
##	3339	OverallQual	CentralAir	0.27
##	3340	OverallCond	CentralAir	0.12
##	3341	YearBuilt	CentralAir	0.38
##	3342	YearRemodAdd	CentralAir	0.30
##	3343	RoofStyle	CentralAir	0.01
##	3344	RoofMatl	CentralAir	0.01
##	3345	Exterior1st	CentralAir	0.03
##	3346	Exterior2nd	CentralAir	0.01
##	3347	MasVnrType	CentralAir	-0.08
##	3348	MasVnrArea	CentralAir	0.13
##	3349	ExterQual	CentralAir	-0.09
##	3350	ExterCond	CentralAir	0.10
##	3351	Foundation	CentralAir	0.17
##	3352	BsmtQual	CentralAir	0.01
##	3353	BsmtCond	CentralAir	0.25
##	3354	BsmtExposure	CentralAir	0.01
##	3355	BsmtFinType1	CentralAir	-0.06
##	3356	BsmtFinSF1	CentralAir	0.17
##	3357	BsmtFinType2	CentralAir	0.11

## 3358	BsmtFinSF2	CentralAir	0.04
## 3359	BsmtUnfSF	CentralAir	0.02
## 3360	TotalBsmtSF	CentralAir	0.21
## 3361	Heating	CentralAir	-0.41
## 3362	HeatingQC	CentralAir	-0.16
## 3363	CentralAir	CentralAir	1.00
## 3364	Electrical	CentralAir	0.31
## 3365	X1stFlrSF	CentralAir	0.15
## 3366	X2ndFlrSF	CentralAir	-0.01
## 3367	LowQualFinSF	CentralAir	-0.05
## 3368	GrLivArea	CentralAir	0.09
## 3369	BsmtFullBath	CentralAir	0.11
## 3370	BsmtHalfBath	CentralAir	0.04
## 3371	FullBath	CentralAir	0.11
## 3372	HalfBath	CentralAir	0.13
## 3373	BedroomAbvGr	CentralAir	0.01
## 3374	KitchenAbvGr	CentralAir	-0.25
## 3375	KitchenQual	CentralAir	-0.05
## 3376	TotRmsAbvGrd	CentralAir	0.03
## 3377	Functional	CentralAir	0.07
## 3378	Fireplaces	CentralAir	0.19
## 3379	FireplaceQu	CentralAir	0.19
## 3380	GarageType	CentralAir	-0.12
## 3381	GarageYrBlt	CentralAir	0.27
## 3382	GarageFinish	CentralAir	-0.02
## 3383	GarageCars	CentralAir	0.23
## 3384	GarageArea	CentralAir	0.23
## 3385	GarageQual	CentralAir	0.30
## 3386	GarageCond	CentralAir	0.32
## 3387	PavedDrive	CentralAir	0.34
## 3388	WoodDeckSF	CentralAir	0.15
## 3389	OpenPorchSF	CentralAir	0.03
## 3390	EnclosedPorch	CentralAir	-0.16
## 3391	X3SsnPorch	CentralAir	0.03
## 3392	ScreenPorch	CentralAir	0.05
## 3393	PoolArea	CentralAir	0.02
## 3394	PoolQC	CentralAir	0.02
## 3395	Fence	CentralAir	0.01
## 3396	MiscFeature	CentralAir	0.00
## 3397	MiscVal	CentralAir	0.00
## 3398	MoSold	CentralAir	0.01
## 3399	YrSold	CentralAir	-0.01
## 3400	SaleType	CentralAir	0.00
## 3401	SaleCondition	CentralAir	0.07
## 3402	SalePrice	CentralAir	0.25
## 3403	Id	Electrical	0.03
## 3404	MSSubClass	Electrical	0.05
## 3405	MSZoning	Electrical	-0.07
## 3406	LotFrontage	Electrical	0.01
## 3407	LotArea	Electrical	0.04
## 3408	Street	Electrical	0.02
## 3409	Alley	Electrical	-0.07
## 3410	LotShape	Electrical	-0.10
## 3411	LandContour	Electrical	0.08

## 3412	Utilities	Electrical	-0.09
## 3413	LotConfig	Electrical	-0.03
## 3414	LandSlope	Electrical	-0.01
## 3415	Neighborhood	Electrical	0.06
## 3416	Condition1	Electrical	0.08
## 3417	Condition2	Electrical	0.02
## 3418	BldgType	Electrical	0.07
## 3419	HouseStyle	Electrical	0.16
## 3420	OverallQual	Electrical	0.26
## 3421	OverallCond	Electrical	0.06
## 3422	YearBuilt	Electrical	0.33
## 3423	YearRemodAdd	Electrical	0.34
## 3424	RoofStyle	Electrical	0.03
## 3425	RoofMatl	Electrical	0.01
## 3426	Exterior1st	Electrical	0.03
## 3427	Exterior2nd	Electrical	-0.02
## 3428	MasVnrType	Electrical	-0.07
## 3429	MasVnrArea	Electrical	0.11
## 3430	ExterQual	Electrical	-0.16
## 3431	ExterCond	Electrical	0.01
## 3432	Foundation	Electrical	0.19
## 3433	BsmtQual	Electrical	-0.05
## 3434	BsmtCond	Electrical	0.17
## 3435	BsmtExposure	Electrical	-0.05
## 3436	BsmtFinType1	Electrical	-0.08
## 3437	BsmtFinSF1	Electrical	0.15
## 3438	BsmtFinType2	Electrical	0.08
## 3439	BsmtFinSF2	Electrical	0.02
## 3440	BsmtUnfSF	Electrical	0.00
## 3441	TotalBsmtSF	Electrical	0.17
## 3442	Heating	Electrical	-0.20
## 3443	HeatingQC	Electrical	-0.14
## 3444	CentralAir	Electrical	0.31
## 3445	Electrical	Electrical	1.00
## 3446	X1stFlrSF	Electrical	0.12
## 3447	X2ndFlrSF	Electrical	0.05
## 3448	LowQualFinSF	Electrical	-0.04
## 3449	GrLivArea	Electrical	0.13
## 3450	BsmtFullBath	Electrical	0.13
## 3451	BsmtHalfBath	Electrical	0.02
## 3452	FullBath	Electrical	0.21
## 3453	HalfBath	Electrical	0.13
## 3454	BedroomAbvGr	Electrical	0.05
## 3455	KitchenAbvGr	Electrical	-0.13
## 3456	KitchenQual	Electrical	-0.08
## 3457	TotRmsAbvGrd	Electrical	0.08
## 3458	Functional	Electrical	0.05
## 3459	Fireplaces	Electrical	0.12
## 3460	FireplaceQu	Electrical	0.15
## 3461	GarageType	Electrical	-0.12
## 3462	GarageYrBlt	Electrical	0.14
## 3463	GarageFinish	Electrical	-0.11
## 3464	GarageCars	Electrical	0.24
## 3465	GarageArea	Electrical	0.23

##	3466	GarageQual	Electrical	0.16
##	3467	GarageCond	Electrical	0.16
##	3468	PavedDrive	Electrical	0.21
##	3469	WoodDeckSF	Electrical	0.15
##	3470	OpenPorchSF	Electrical	0.09
##	3471	EnclosedPorch	Electrical	-0.14
##	3472	X3SsnPorch	Electrical	0.01
##	3473	ScreenPorch	Electrical	0.01
##	3474	PoolArea	Electrical	0.02
##	3475	PoolQC	Electrical	0.02
##	3476	Fence	Electrical	-0.02
##	3477	MiscFeature	Electrical	0.03
##	3478	MiscVal	Electrical	0.02
##	3479	MoSold	Electrical	-0.01
##	3480	YrSold	Electrical	0.03
##	3481	SaleType	Electrical	0.01
##	3482	SaleCondition	Electrical	0.10
##	3483	SalePrice	Electrical	0.23
##	3484	Id	X1stFlrSF	0.01
##	3485	MSSubClass	X1stFlrSF	-0.25
##	3486	MSZoning	X1stFlrSF	-0.06
##	3487	LotFrontage	X1stFlrSF	0.25
##	3488	LotArea	X1stFlrSF	0.30
##	3489	Street	X1stFlrSF	0.01
##	3490	Alley	X1stFlrSF	-0.13
##	3491	LotShape	X1stFlrSF	-0.17
##	3492	LandContour	X1stFlrSF	-0.04
##	3493	Utilities	X1stFlrSF	0.01
##	3494	LotConfig	X1stFlrSF	-0.06
##	3495	LandSlope	X1stFlrSF	0.07
##	3496	Neighborhood	X1stFlrSF	0.15
##	3497	Condition1	X1stFlrSF	0.05
##	3498	Condition2	X1stFlrSF	0.04
##	3499	BldgType	X1stFlrSF	-0.07
##	3500	HouseStyle	X1stFlrSF	-0.17
##	3501	OverallQual	X1stFlrSF	0.48
##	3502	OverallCond	X1stFlrSF	-0.14
##	3503	YearBuilt	X1stFlrSF	0.28
##	3504	YearRemodAdd	X1stFlrSF	0.24
##	3505	RoofStyle	X1stFlrSF	0.30
##	3506	RoofMatl	X1stFlrSF	0.15
##	3507	Exterior1st	X1stFlrSF	0.01
##	3508	Exterior2nd	X1stFlrSF	0.02
##	3509	MasVnrType	X1stFlrSF	-0.03
##	3510	MasVnrArea	X1stFlrSF	0.34
##	3511	ExterQual	X1stFlrSF	-0.38
##	3512	ExterCond	X1stFlrSF	0.07
##	3513	Foundation	X1stFlrSF	0.19
##	3514	BsmtQual	X1stFlrSF	-0.29
##	3515	BsmtCond	X1stFlrSF	0.04
##	3516	BsmtExposure	X1stFlrSF	-0.21
##	3517	BsmtFinType1	X1stFlrSF	-0.09
##	3518	BsmtFinSF1	X1stFlrSF	0.45
##	3519	BsmtFinType2	X1stFlrSF	-0.01

## 3520	BsmtFinSF2	X1stFlrSF	0.10
## 3521	BsmtUnfSF	X1stFlrSF	0.32
## 3522	TotalBsmtSF	X1stFlrSF	0.82
## 3523	Heating	X1stFlrSF	-0.05
## 3524	HeatingQC	X1stFlrSF	-0.17
## 3525	CentralAir	X1stFlrSF	0.15
## 3526	Electrical	X1stFlrSF	0.12
## 3527	X1stFlrSF	X1stFlrSF	1.00
## 3528	X2ndFlrSF	X1stFlrSF	-0.20
## 3529	LowQualFinSF	X1stFlrSF	-0.01
## 3530	GrLivArea	X1stFlrSF	0.57
## 3531	BsmtFullBath	X1stFlrSF	0.24
## 3532	BsmtHalfBath	X1stFlrSF	0.00
## 3533	FullBath	X1stFlrSF	0.38
## 3534	HalfBath	X1stFlrSF	-0.12
## 3535	BedroomAbvGr	X1stFlrSF	0.13
## 3536	KitchenAbvGr	X1stFlrSF	0.07
## 3537	KitchenQual	X1stFlrSF	-0.36
## 3538	TotRmsAbvGrd	X1stFlrSF	0.41
## 3539	Functional	X1stFlrSF	-0.08
## 3540	Fireplaces	X1stFlrSF	0.41
## 3541	FireplaceQu	X1stFlrSF	0.30
## 3542	GarageType	X1stFlrSF	-0.26
## 3543	GarageYrBlt	X1stFlrSF	0.17
## 3544	GarageFinish	X1stFlrSF	-0.17
## 3545	GarageCars	X1stFlrSF	0.44
## 3546	GarageArea	X1stFlrSF	0.49
## 3547	GarageQual	X1stFlrSF	0.18
## 3548	GarageCond	X1stFlrSF	0.19
## 3549	PavedDrive	X1stFlrSF	0.16
## 3550	WoodDeckSF	X1stFlrSF	0.24
## 3551	OpenPorchSF	X1stFlrSF	0.21
## 3552	EnclosedPorch	X1stFlrSF	-0.07
## 3553	X3SsnPorch	X1stFlrSF	0.06
## 3554	ScreenPorch	X1stFlrSF	0.09
## 3555	PoolArea	X1stFlrSF	0.13
## 3556	PoolQC	X1stFlrSF	0.15
## 3557	Fence	X1stFlrSF	-0.09
## 3558	MiscFeature	X1stFlrSF	-0.05
## 3559	MiscVal	X1stFlrSF	-0.02
## 3560	MoSold	X1stFlrSF	0.03
## 3561	YrSold	X1stFlrSF	-0.01
## 3562	SaleType	X1stFlrSF	-0.11
## 3563	SaleCondition	X1stFlrSF	0.08
## 3564	SalePrice	X1stFlrSF	0.61
## 3565	Id	X2ndFlrSF	0.01
## 3566	MSSubClass	X2ndFlrSF	0.31
## 3567	MSZoning	X2ndFlrSF	-0.05
## 3568	LotFrontage	X2ndFlrSF	0.04
## 3569	LotArea	X2ndFlrSF	0.05
## 3570	Street	X2ndFlrSF	0.05
## 3571	Alley	X2ndFlrSF	0.10
## 3572	LotShape	X2ndFlrSF	-0.06
## 3573	LandContour	X2ndFlrSF	-0.03

## 3574	Utilities	X2ndFlrSF	-0.02
## 3575	LotConfig	X2ndFlrSF	-0.05
## 3576	LandSlope	X2ndFlrSF	-0.01
## 3577	Neighborhood	X2ndFlrSF	0.03
## 3578	Condition1	X2ndFlrSF	0.02
## 3579	Condition2	X2ndFlrSF	0.00
## 3580	BldgType	X2ndFlrSF	-0.08
## 3581	HouseStyle	X2ndFlrSF	0.48
## 3582	OverallQual	X2ndFlrSF	0.30
## 3583	OverallCond	X2ndFlrSF	0.03
## 3584	YearBuilt	X2ndFlrSF	0.01
## 3585	YearRemodAdd	X2ndFlrSF	0.14
## 3586	RoofStyle	X2ndFlrSF	-0.07
## 3587	RoofMatl	X2ndFlrSF	0.01
## 3588	Exterior1st	X2ndFlrSF	0.07
## 3589	Exterior2nd	X2ndFlrSF	0.06
## 3590	MasVnrType	X2ndFlrSF	-0.05
## 3591	MasVnrArea	X2ndFlrSF	0.17
## 3592	ExterQual	X2ndFlrSF	-0.15
## 3593	ExterCond	X2ndFlrSF	0.00
## 3594	Foundation	X2ndFlrSF	0.11
## 3595	BsmtQual	X2ndFlrSF	-0.07
## 3596	BsmtCond	X2ndFlrSF	0.01
## 3597	BsmtExposure	X2ndFlrSF	0.14
## 3598	BsmtFinType1	X2ndFlrSF	0.20
## 3599	BsmtFinSF1	X2ndFlrSF	-0.14
## 3600	BsmtFinType2	X2ndFlrSF	0.10
## 3601	BsmtFinSF2	X2ndFlrSF	-0.10
## 3602	BsmtUnfSF	X2ndFlrSF	0.00
## 3603	TotalBsmtSF	X2ndFlrSF	-0.17
## 3604	Heating	X2ndFlrSF	0.02
## 3605	HeatingQC	X2ndFlrSF	-0.14
## 3606	CentralAir	X2ndFlrSF	-0.01
## 3607	Electrical	X2ndFlrSF	0.05
## 3608	X1stFlrSF	X2ndFlrSF	-0.20
## 3609	X2ndFlrSF	X2ndFlrSF	1.00
## 3610	LowQualFinSF	X2ndFlrSF	0.06
## 3611	GrLivArea	X2ndFlrSF	0.69
## 3612	BsmtFullBath	X2ndFlrSF	-0.17
## 3613	BsmtHalfBath	X2ndFlrSF	-0.02
## 3614	FullBath	X2ndFlrSF	0.42
## 3615	HalfBath	X2ndFlrSF	0.61
## 3616	BedroomAbvGr	X2ndFlrSF	0.50
## 3617	KitchenAbvGr	X2ndFlrSF	0.06
## 3618	KitchenQual	X2ndFlrSF	-0.14
## 3619	TotRmsAbvGrd	X2ndFlrSF	0.62
## 3620	Functional	X2ndFlrSF	0.02
## 3621	Fireplaces	X2ndFlrSF	0.19
## 3622	FireplaceQu	X2ndFlrSF	0.23
## 3623	GarageType	X2ndFlrSF	0.09
## 3624	GarageYrBlt	X2ndFlrSF	0.06
## 3625	GarageFinish	X2ndFlrSF	-0.08
## 3626	GarageCars	X2ndFlrSF	0.18
## 3627	GarageArea	X2ndFlrSF	0.14

##	3628	GarageQual	X2ndFlrSF	0.03
##	3629	GarageCond	X2ndFlrSF	0.05
##	3630	PavedDrive	X2ndFlrSF	-0.04
##	3631	WoodDeckSF	X2ndFlrSF	0.09
##	3632	OpenPorchSF	X2ndFlrSF	0.21
##	3633	EnclosedPorch	X2ndFlrSF	0.06
##	3634	X3SsnPorch	X2ndFlrSF	-0.02
##	3635	ScreenPorch	X2ndFlrSF	0.04
##	3636	PoolArea	X2ndFlrSF	0.08
##	3637	PoolQC	X2ndFlrSF	0.06
##	3638	Fence	X2ndFlrSF	-0.09
##	3639	MiscFeature	X2ndFlrSF	-0.01
##	3640	MiscVal	X2ndFlrSF	0.02
##	3641	MoSold	X2ndFlrSF	0.04
##	3642	YrSold	X2ndFlrSF	-0.03
##	3643	SaleType	X2ndFlrSF	0.05
##	3644	SaleCondition	X2ndFlrSF	0.04
##	3645	SalePrice	X2ndFlrSF	0.32
##	3646	Id	LowQualFinSF	-0.04
##	3647	MSSubClass	LowQualFinSF	0.05
##	3648	MSZoning	LowQualFinSF	0.01
##	3649	LotFrontage	LowQualFinSF	0.05
##	3650	LotArea	LowQualFinSF	0.00
##	3651	Street	LowQualFinSF	0.01
##	3652	Alley	LowQualFinSF	0.06
##	3653	LotShape	LowQualFinSF	0.02
##	3654	LandContour	LowQualFinSF	-0.10
##	3655	Utilities	LowQualFinSF	0.00
##	3656	LotConfig	LowQualFinSF	0.00
##	3657	LandSlope	LowQualFinSF	0.01
##	3658	Neighborhood	LowQualFinSF	0.06
##	3659	Condition1	LowQualFinSF	-0.05
##	3660	Condition2	LowQualFinSF	-0.04
##	3661	BldgType	LowQualFinSF	-0.03
##	3662	HouseStyle	LowQualFinSF	-0.08
##	3663	OverallQual	LowQualFinSF	-0.03
##	3664	OverallCond	LowQualFinSF	0.03
##	3665	YearBuilt	LowQualFinSF	-0.18
##	3666	YearRemodAdd	LowQualFinSF	-0.06
##	3667	RoofStyle	LowQualFinSF	-0.02
##	3668	RoofMatl	LowQualFinSF	0.07
##	3669	Exterior1st	LowQualFinSF	0.04
##	3670	Exterior2nd	LowQualFinSF	0.03
##	3671	MasVnrType	LowQualFinSF	0.05
##	3672	MasVnrArea	LowQualFinSF	-0.07
##	3673	ExterQual	LowQualFinSF	0.00
##	3674	ExterCond	LowQualFinSF	-0.07
##	3675	Foundation	LowQualFinSF	-0.09
##	3676	BsmtQual	LowQualFinSF	0.07
##	3677	BsmtCond	LowQualFinSF	-0.05
##	3678	BsmtExposure	LowQualFinSF	0.06
##	3679	BsmtFinType1	LowQualFinSF	0.08
##	3680	BsmtFinSF1	LowQualFinSF	-0.06
##	3681	BsmtFinType2	LowQualFinSF	-0.01

##	3682	BsmtFinSF2	LowQualFinSF	0.01
##	3683	BsmtUnfSF	LowQualFinSF	0.03
##	3684	TotalBsmtSF	LowQualFinSF	-0.03
##	3685	Heating	LowQualFinSF	0.01
##	3686	HeatingQC	LowQualFinSF	0.02
##	3687	CentralAir	LowQualFinSF	-0.05
##	3688	Electrical	LowQualFinSF	-0.04
##	3689	X1stFlrSF	LowQualFinSF	-0.01
##	3690	X2ndFlrSF	LowQualFinSF	0.06
##	3691	LowQualFinSF	LowQualFinSF	1.00
##	3692	GrLivArea	LowQualFinSF	0.13
##	3693	BsmtFullBath	LowQualFinSF	-0.05
##	3694	BsmtHalfBath	LowQualFinSF	-0.01
##	3695	FullBath	LowQualFinSF	0.00
##	3696	HalfBath	LowQualFinSF	-0.03
##	3697	BedroomAbvGr	LowQualFinSF	0.11
##	3698	KitchenAbvGr	LowQualFinSF	0.01
##	3699	KitchenQual	LowQualFinSF	-0.01
##	3700	TotRmsAbvGrd	LowQualFinSF	0.13
##	3701	Functional	LowQualFinSF	-0.07
##	3702	Fireplaces	LowQualFinSF	-0.02
##	3703	FireplaceQu	LowQualFinSF	-0.04
##	3704	GarageType	LowQualFinSF	0.04
##	3705	GarageYrBltd	LowQualFinSF	-0.15
##	3706	GarageFinish	LowQualFinSF	-0.03
##	3707	GarageCars	LowQualFinSF	-0.09
##	3708	GarageArea	LowQualFinSF	-0.07
##	3709	GarageQual	LowQualFinSF	-0.15
##	3710	GarageCond	LowQualFinSF	-0.14
##	3711	PavedDrive	LowQualFinSF	-0.07
##	3712	WoodDeckSF	LowQualFinSF	-0.03
##	3713	OpenPorchSF	LowQualFinSF	0.02
##	3714	EnclosedPorch	LowQualFinSF	0.06
##	3715	X3SsnPorch	LowQualFinSF	0.00
##	3716	ScreenPorch	LowQualFinSF	0.03
##	3717	PoolArea	LowQualFinSF	0.06
##	3718	PoolQC	LowQualFinSF	0.03
##	3719	Fence	LowQualFinSF	0.04
##	3720	MiscFeature	LowQualFinSF	0.03
##	3721	MiscVal	LowQualFinSF	0.00
##	3722	MoSold	LowQualFinSF	-0.02
##	3723	YrSold	LowQualFinSF	-0.03
##	3724	SaleType	LowQualFinSF	0.01
##	3725	SaleCondition	LowQualFinSF	-0.07
##	3726	SalePrice	LowQualFinSF	-0.03
##	3727	Id	GrLivArea	0.01
##	3728	MSSubClass	GrLivArea	0.07
##	3729	MSZoning	GrLivArea	-0.08
##	3730	LotFrontage	GrLivArea	0.22
##	3731	LotArea	GrLivArea	0.26
##	3732	Street	GrLivArea	0.04
##	3733	Alley	GrLivArea	0.00
##	3734	LotShape	GrLivArea	-0.18
##	3735	LandContour	GrLivArea	-0.07

## 3736	Utilities	GrLivArea	-0.01
## 3737	LotConfig	GrLivArea	-0.09
## 3738	LandSlope	GrLivArea	0.04
## 3739	Neighborhood	GrLivArea	0.14
## 3740	Condition1	GrLivArea	0.05
## 3741	Condition2	GrLivArea	0.03
## 3742	BldgType	GrLivArea	-0.13
## 3743	HouseStyle	GrLivArea	0.26
## 3744	OverallQual	GrLivArea	0.59
## 3745	OverallCond	GrLivArea	-0.08
## 3746	YearBuilt	GrLivArea	0.20
## 3747	YearRemodAdd	GrLivArea	0.29
## 3748	RoofStyle	GrLivArea	0.16
## 3749	RoofMatl	GrLivArea	0.13
## 3750	Exterior1st	GrLivArea	0.07
## 3751	Exterior2nd	GrLivArea	0.07
## 3752	MasVnrType	GrLivArea	-0.06
## 3753	MasVnrArea	GrLivArea	0.39
## 3754	ExterQual	GrLivArea	-0.41
## 3755	ExterCond	GrLivArea	0.04
## 3756	Foundation	GrLivArea	0.22
## 3757	BsmtQual	GrLivArea	-0.27
## 3758	BsmtCond	GrLivArea	0.03
## 3759	BsmtExposure	GrLivArea	-0.03
## 3760	BsmtFinType1	GrLivArea	0.11
## 3761	BsmtFinSF1	GrLivArea	0.21
## 3762	BsmtFinType2	GrLivArea	0.07
## 3763	BsmtFinSF2	GrLivArea	-0.01
## 3764	BsmtUnfSF	GrLivArea	0.24
## 3765	TotalBsmtSF	GrLivArea	0.45
## 3766	Heating	GrLivArea	-0.02
## 3767	HeatingQC	GrLivArea	-0.24
## 3768	CentralAir	GrLivArea	0.09
## 3769	Electrical	GrLivArea	0.13
## 3770	X1stFlrSF	GrLivArea	0.57
## 3771	X2ndFlrSF	GrLivArea	0.69
## 3772	LowQualFinSF	GrLivArea	0.13
## 3773	GrLivArea	GrLivArea	1.00
## 3774	BsmtFullBath	GrLivArea	0.03
## 3775	BsmtHalfBath	GrLivArea	-0.02
## 3776	FullBath	GrLivArea	0.63
## 3777	HalfBath	GrLivArea	0.42
## 3778	BedroomAbvGr	GrLivArea	0.52
## 3779	KitchenAbvGr	GrLivArea	0.10
## 3780	KitchenQual	GrLivArea	-0.38
## 3781	TotRmsAbvGrd	GrLivArea	0.83
## 3782	Functional	GrLivArea	-0.05
## 3783	Fireplaces	GrLivArea	0.46
## 3784	FireplaceQu	GrLivArea	0.40
## 3785	GarageType	GrLivArea	-0.11
## 3786	GarageYrBlt	GrLivArea	0.16
## 3787	GarageFinish	GrLivArea	-0.19
## 3788	GarageCars	GrLivArea	0.47
## 3789	GarageArea	GrLivArea	0.47

## 3790	GarageQual	GrLivArea	0.14
## 3791	GarageCond	GrLivArea	0.17
## 3792	PavedDrive	GrLivArea	0.08
## 3793	WoodDeckSF	GrLivArea	0.25
## 3794	OpenPorchSF	GrLivArea	0.33
## 3795	EnclosedPorch	GrLivArea	0.01
## 3796	X3SsnPorch	GrLivArea	0.02
## 3797	ScreenPorch	GrLivArea	0.10
## 3798	PoolArea	GrLivArea	0.17
## 3799	PoolQC	GrLivArea	0.16
## 3800	Fence	GrLivArea	-0.13
## 3801	MiscFeature	GrLivArea	-0.04
## 3802	MiscVal	GrLivArea	0.00
## 3803	MoSold	GrLivArea	0.05
## 3804	YrSold	GrLivArea	-0.04
## 3805	SaleType	GrLivArea	-0.04
## 3806	SaleCondition	GrLivArea	0.08
## 3807	SalePrice	GrLivArea	0.71
## 3808	Id	BsmtFullBath	0.00
## 3809	MSSubClass	BsmtFullBath	0.00
## 3810	MSZoning	BsmtFullBath	-0.02
## 3811	LotFrontage	BsmtFullBath	0.01
## 3812	LotArea	BsmtFullBath	0.16
## 3813	Street	BsmtFullBath	-0.05
## 3814	Alley	BsmtFullBath	-0.10
## 3815	LotShape	BsmtFullBath	-0.08
## 3816	LandContour	BsmtFullBath	0.01
## 3817	Utilities	BsmtFullBath	-0.02
## 3818	LotConfig	BsmtFullBath	-0.01
## 3819	LandSlope	BsmtFullBath	0.12
## 3820	Neighborhood	BsmtFullBath	0.05
## 3821	Condition1	BsmtFullBath	0.03
## 3822	Condition2	BsmtFullBath	0.00
## 3823	BldgType	BsmtFullBath	0.05
## 3824	HouseStyle	BsmtFullBath	0.04
## 3825	OverallQual	BsmtFullBath	0.11
## 3826	OverallCond	BsmtFullBath	-0.05
## 3827	YearBuilt	BsmtFullBath	0.19
## 3828	YearRemodAdd	BsmtFullBath	0.12
## 3829	RoofStyle	BsmtFullBath	0.09
## 3830	RoofMatl	BsmtFullBath	0.05
## 3831	Exterior1st	BsmtFullBath	-0.01
## 3832	Exterior2nd	BsmtFullBath	-0.01
## 3833	MasVnrType	BsmtFullBath	0.00
## 3834	MasVnrArea	BsmtFullBath	0.08
## 3835	ExterQual	BsmtFullBath	-0.10
## 3836	ExterCond	BsmtFullBath	0.01
## 3837	Foundation	BsmtFullBath	0.06
## 3838	BsmtQual	BsmtFullBath	-0.06
## 3839	BsmtCond	BsmtFullBath	0.12
## 3840	BsmtExposure	BsmtFullBath	-0.18
## 3841	BsmtFinType1	BsmtFullBath	-0.40
## 3842	BsmtFinSF1	BsmtFullBath	0.65
## 3843	BsmtFinType2	BsmtFullBath	-0.01

##	3844	BsmtFinSF2	BsmtFullBath	0.16
##	3845	BsmtUnfSF	BsmtFullBath	-0.42
##	3846	TotalBsmtSF	BsmtFullBath	0.31
##	3847	Heating	BsmtFullBath	-0.06
##	3848	HeatingQC	BsmtFullBath	-0.06
##	3849	CentralAir	BsmtFullBath	0.11
##	3850	Electrical	BsmtFullBath	0.13
##	3851	X1stFlrSF	BsmtFullBath	0.24
##	3852	X2ndFlrSF	BsmtFullBath	-0.17
##	3853	LowQualFinSF	BsmtFullBath	-0.05
##	3854	GrLivArea	BsmtFullBath	0.03
##	3855	BsmtFullBath	BsmtFullBath	1.00
##	3856	BsmtHalfBath	BsmtFullBath	-0.15
##	3857	FullBath	BsmtFullBath	-0.06
##	3858	HalfBath	BsmtFullBath	-0.03
##	3859	BedroomAbvGr	BsmtFullBath	-0.15
##	3860	KitchenAbvGr	BsmtFullBath	-0.04
##	3861	KitchenQual	BsmtFullBath	-0.12
##	3862	TotRmsAbvGrd	BsmtFullBath	-0.05
##	3863	Functional	BsmtFullBath	0.02
##	3864	Fireplaces	BsmtFullBath	0.14
##	3865	FireplaceQu	BsmtFullBath	0.08
##	3866	GarageType	BsmtFullBath	-0.14
##	3867	GarageYrBlt	BsmtFullBath	0.05
##	3868	GarageFinish	BsmtFullBath	-0.11
##	3869	GarageCars	BsmtFullBath	0.13
##	3870	GarageArea	BsmtFullBath	0.18
##	3871	GarageQual	BsmtFullBath	0.08
##	3872	GarageCond	BsmtFullBath	0.07
##	3873	PavedDrive	BsmtFullBath	0.12
##	3874	WoodDeckSF	BsmtFullBath	0.18
##	3875	OpenPorchSF	BsmtFullBath	0.07
##	3876	EnclosedPorch	BsmtFullBath	-0.05
##	3877	X3SsnPorch	BsmtFullBath	0.00
##	3878	ScreenPorch	BsmtFullBath	0.02
##	3879	PoolArea	BsmtFullBath	0.07
##	3880	PoolQC	BsmtFullBath	0.07
##	3881	Fence	BsmtFullBath	0.01
##	3882	MiscFeature	BsmtFullBath	0.00
##	3883	MiscVal	BsmtFullBath	-0.02
##	3884	MoSold	BsmtFullBath	-0.03
##	3885	YrSold	BsmtFullBath	0.07
##	3886	SaleType	BsmtFullBath	0.03
##	3887	SaleCondition	BsmtFullBath	0.01
##	3888	SalePrice	BsmtFullBath	0.23
##	3889	Id	BsmtHalfBath	-0.02
##	3890	MSSubClass	BsmtHalfBath	0.00
##	3891	MSZoning	BsmtHalfBath	0.01
##	3892	LotFrontage	BsmtHalfBath	-0.03
##	3893	LotArea	BsmtHalfBath	0.05
##	3894	Street	BsmtHalfBath	0.02
##	3895	Alley	BsmtHalfBath	-0.04
##	3896	LotShape	BsmtHalfBath	-0.03
##	3897	LandContour	BsmtHalfBath	0.02

##	3898	Utilities	BsmtHalfBath	0.10
##	3899	LotConfig	BsmtHalfBath	-0.01
##	3900	LandSlope	BsmtHalfBath	0.07
##	3901	Neighborhood	BsmtHalfBath	-0.02
##	3902	Condition1	BsmtHalfBath	-0.06
##	3903	Condition2	BsmtHalfBath	-0.01
##	3904	BldgType	BsmtHalfBath	0.00
##	3905	HouseStyle	BsmtHalfBath	0.04
##	3906	OverallQual	BsmtHalfBath	-0.04
##	3907	OverallCond	BsmtHalfBath	0.12
##	3908	YearBuilt	BsmtHalfBath	-0.04
##	3909	YearRemodAdd	BsmtHalfBath	-0.01
##	3910	RoofStyle	BsmtHalfBath	0.00
##	3911	RoofMatl	BsmtHalfBath	0.08
##	3912	Exterior1st	BsmtHalfBath	0.00
##	3913	Exterior2nd	BsmtHalfBath	-0.05
##	3914	MasVnrType	BsmtHalfBath	-0.07
##	3915	MasVnrArea	BsmtHalfBath	0.03
##	3916	ExterQual	BsmtHalfBath	0.06
##	3917	ExterCond	BsmtHalfBath	-0.06
##	3918	Foundation	BsmtHalfBath	-0.06
##	3919	BsmtQual	BsmtHalfBath	0.06
##	3920	BsmtCond	BsmtHalfBath	-0.02
##	3921	BsmtExposure	BsmtHalfBath	-0.03
##	3922	BsmtFinType1	BsmtHalfBath	-0.09
##	3923	BsmtFinSF1	BsmtHalfBath	0.07
##	3924	BsmtFinType2	BsmtHalfBath	-0.04
##	3925	BsmtFinSF2	BsmtHalfBath	0.07
##	3926	BsmtUnfSF	BsmtHalfBath	-0.10
##	3927	TotalBsmtSF	BsmtHalfBath	0.00
##	3928	Heating	BsmtHalfBath	-0.01
##	3929	HeatingQC	BsmtHalfBath	0.04
##	3930	CentralAir	BsmtHalfBath	0.04
##	3931	Electrical	BsmtHalfBath	0.02
##	3932	X1stFlrSF	BsmtHalfBath	0.00
##	3933	X2ndFlrSF	BsmtHalfBath	-0.02
##	3934	LowQualFinSF	BsmtHalfBath	-0.01
##	3935	GrLivArea	BsmtHalfBath	-0.02
##	3936	BsmtFullBath	BsmtHalfBath	-0.15
##	3937	BsmtHalfBath	BsmtHalfBath	1.00
##	3938	FullBath	BsmtHalfBath	-0.05
##	3939	HalfBath	BsmtHalfBath	-0.01
##	3940	BedroomAbvGr	BsmtHalfBath	0.05
##	3941	KitchenAbvGr	BsmtHalfBath	-0.04
##	3942	KitchenQual	BsmtHalfBath	0.03
##	3943	TotRmsAbvGrd	BsmtHalfBath	-0.02
##	3944	Functional	BsmtHalfBath	-0.02
##	3945	Fireplaces	BsmtHalfBath	0.03
##	3946	FireplaceQu	BsmtHalfBath	0.03
##	3947	GarageType	BsmtHalfBath	-0.01
##	3948	GarageYrBlt	BsmtHalfBath	0.02
##	3949	GarageFinish	BsmtHalfBath	0.05
##	3950	GarageCars	BsmtHalfBath	-0.02
##	3951	GarageArea	BsmtHalfBath	-0.02

## 3952	GarageQual	BsmtHalfBath	0.04
## 3953	GarageCond	BsmtHalfBath	0.03
## 3954	PavedDrive	BsmtHalfBath	0.04
## 3955	WoodDeckSF	BsmtHalfBath	0.04
## 3956	OpenPorchSF	BsmtHalfBath	-0.03
## 3957	EnclosedPorch	BsmtHalfBath	-0.01
## 3958	X3SsnPorch	BsmtHalfBath	0.04
## 3959	ScreenPorch	BsmtHalfBath	0.03
## 3960	PoolArea	BsmtHalfBath	0.02
## 3961	PoolQC	BsmtHalfBath	0.00
## 3962	Fence	BsmtHalfBath	0.04
## 3963	MiscFeature	BsmtHalfBath	0.03
## 3964	MiscVal	BsmtHalfBath	-0.01
## 3965	MoSold	BsmtHalfBath	0.03
## 3966	YrSold	BsmtHalfBath	-0.05
## 3967	SaleType	BsmtHalfBath	0.01
## 3968	SaleCondition	BsmtHalfBath	-0.06
## 3969	SalePrice	BsmtHalfBath	-0.02
## 3970	Id	FullBath	0.01
## 3971	MSSubClass	FullBath	0.13
## 3972	MSZoning	FullBath	-0.20
## 3973	LotFrontage	FullBath	0.12
## 3974	LotArea	FullBath	0.13
## 3975	Street	FullBath	0.05
## 3976	Alley	FullBath	-0.01
## 3977	LotShape	FullBath	-0.16
## 3978	LandContour	FullBath	0.05
## 3979	Utilities	FullBath	-0.03
## 3980	LotConfig	FullBath	-0.01
## 3981	LandSlope	FullBath	-0.05
## 3982	Neighborhood	FullBath	0.13
## 3983	Condition1	FullBath	0.10
## 3984	Condition2	FullBath	0.02
## 3985	BldgType	FullBath	0.07
## 3986	HouseStyle	FullBath	0.24
## 3987	OverallQual	FullBath	0.55
## 3988	OverallCond	FullBath	-0.19
## 3989	YearBuilt	FullBath	0.47
## 3990	YearRemodAdd	FullBath	0.44
## 3991	RoofStyle	FullBath	0.02
## 3992	RoofMatl	FullBath	0.01
## 3993	Exterior1st	FullBath	0.12
## 3994	Exterior2nd	FullBath	0.11
## 3995	MasVnrType	FullBath	-0.04
## 3996	MasVnrArea	FullBath	0.27
## 3997	ExterQual	FullBath	-0.41
## 3998	ExterCond	FullBath	0.09
## 3999	Foundation	FullBath	0.39
## 4000	BsmtQual	FullBath	-0.37
## 4001	BsmtCond	FullBath	0.00
## 4002	BsmtExposure	FullBath	-0.09
## 4003	BsmtFinType1	FullBath	0.09
## 4004	BsmtFinSF1	FullBath	0.06
## 4005	BsmtFinType2	FullBath	0.05

## 4006	BsmtFinSF2	FullBath	-0.08
## 4007	BsmtUnfSF	FullBath	0.29
## 4008	TotalBsmtSF	FullBath	0.32
## 4009	Heating	FullBath	0.00
## 4010	HeatingQC	FullBath	-0.32
## 4011	CentralAir	FullBath	0.11
## 4012	Electrical	FullBath	0.21
## 4013	X1stFlrSF	FullBath	0.38
## 4014	X2ndFlrSF	FullBath	0.42
## 4015	LowQualFinSF	FullBath	0.00
## 4016	GrLivArea	FullBath	0.63
## 4017	BsmtFullBath	FullBath	-0.06
## 4018	BsmtHalfBath	FullBath	-0.05
## 4019	FullBath	FullBath	1.00
## 4020	HalfBath	FullBath	0.14
## 4021	BedroomAbvGr	FullBath	0.36
## 4022	KitchenAbvGr	FullBath	0.13
## 4023	KitchenQual	FullBath	-0.34
## 4024	TotRmsAbvGrd	FullBath	0.55
## 4025	Functional	FullBath	0.02
## 4026	Fireplaces	FullBath	0.24
## 4027	FireplaceQu	FullBath	0.28
## 4028	GarageType	FullBath	-0.21
## 4029	GarageYrBlt	FullBath	0.14
## 4030	GarageFinish	FullBath	-0.28
## 4031	GarageCars	FullBath	0.47
## 4032	GarageArea	FullBath	0.41
## 4033	GarageQual	FullBath	0.15
## 4034	GarageCond	FullBath	0.15
## 4035	PavedDrive	FullBath	0.13
## 4036	WoodDeckSF	FullBath	0.19
## 4037	OpenPorchSF	FullBath	0.26
## 4038	EnclosedPorch	FullBath	-0.12
## 4039	X3SsnPorch	FullBath	0.04
## 4040	ScreenPorch	FullBath	-0.01
## 4041	PoolArea	FullBath	0.05
## 4042	PoolQC	FullBath	0.04
## 4043	Fence	FullBath	-0.22
## 4044	MiscFeature	FullBath	-0.05
## 4045	MiscVal	FullBath	-0.01
## 4046	MoSold	FullBath	0.06
## 4047	YrSold	FullBath	-0.02
## 4048	SaleType	FullBath	-0.03
## 4049	SaleCondition	FullBath	0.14
## 4050	SalePrice	FullBath	0.56
## 4051	Id	HalfBath	0.01
## 4052	MSSubClass	HalfBath	0.18
## 4053	MSZoning	HalfBath	-0.13
## 4054	LotFrontage	HalfBath	-0.01
## 4055	LotArea	HalfBath	0.01
## 4056	Street	HalfBath	0.03
## 4057	Alley	HalfBath	0.00
## 4058	LotShape	HalfBath	-0.11
## 4059	LandContour	HalfBath	0.03

## 4060	Utilities	HalfBath	-0.02
## 4061	LotConfig	HalfBath	-0.03
## 4062	LandSlope	HalfBath	0.00
## 4063	Neighborhood	HalfBath	0.05
## 4064	Condition1	HalfBath	0.06
## 4065	Condition2	HalfBath	0.02
## 4066	BldgType	HalfBath	-0.01
## 4067	HouseStyle	HalfBath	0.41
## 4068	OverallQual	HalfBath	0.27
## 4069	OverallCond	HalfBath	-0.06
## 4070	YearBuilt	HalfBath	0.24
## 4071	YearRemodAdd	HalfBath	0.18
## 4072	RoofStyle	HalfBath	-0.01
## 4073	RoofMatl	HalfBath	0.03
## 4074	Exterior1st	HalfBath	-0.01
## 4075	Exterior2nd	HalfBath	-0.01
## 4076	MasVnrType	HalfBath	-0.13
## 4077	MasVnrArea	HalfBath	0.20
## 4078	ExterQual	HalfBath	-0.16
## 4079	ExterCond	HalfBath	0.10
## 4080	Foundation	HalfBath	0.14
## 4081	BsmtQual	HalfBath	-0.05
## 4082	BsmtCond	HalfBath	0.13
## 4083	BsmtExposure	HalfBath	0.12
## 4084	BsmtFinType1	HalfBath	0.07
## 4085	BsmtFinSF1	HalfBath	0.00
## 4086	BsmtFinType2	HalfBath	0.13
## 4087	BsmtFinSF2	HalfBath	-0.03
## 4088	BsmtUnfSF	HalfBath	-0.04
## 4089	TotalBsmtSF	HalfBath	-0.05
## 4090	Heating	HalfBath	-0.05
## 4091	HeatingQC	HalfBath	-0.10
## 4092	CentralAir	HalfBath	0.13
## 4093	Electrical	HalfBath	0.13
## 4094	X1stFlrSF	HalfBath	-0.12
## 4095	X2ndFlrSF	HalfBath	0.61
## 4096	LowQualFinSF	HalfBath	-0.03
## 4097	GrLivArea	HalfBath	0.42
## 4098	BsmtFullBath	HalfBath	-0.03
## 4099	BsmtHalfBath	HalfBath	-0.01
## 4100	FullBath	HalfBath	0.14
## 4101	HalfBath	HalfBath	1.00
## 4102	BedroomAbvGr	HalfBath	0.23
## 4103	KitchenAbvGr	HalfBath	-0.07
## 4104	KitchenQual	HalfBath	-0.14
## 4105	TotRmsAbvGrd	HalfBath	0.34
## 4106	Functional	HalfBath	0.08
## 4107	Fireplaces	HalfBath	0.20
## 4108	FireplaceQu	HalfBath	0.24
## 4109	GarageType	HalfBath	-0.05
## 4110	GarageYrBlt	HalfBath	0.12
## 4111	GarageFinish	HalfBath	-0.13
## 4112	GarageCars	HalfBath	0.22
## 4113	GarageArea	HalfBath	0.16

## 4114	GarageQual	HalfBath	0.11
## 4115	GarageCond	HalfBath	0.13
## 4116	PavedDrive	HalfBath	0.11
## 4117	WoodDeckSF	HalfBath	0.11
## 4118	OpenPorchSF	HalfBath	0.20
## 4119	EnclosedPorch	HalfBath	-0.10
## 4120	X3SsnPorch	HalfBath	0.00
## 4121	ScreenPorch	HalfBath	0.07
## 4122	PoolArea	HalfBath	0.02
## 4123	PoolQC	HalfBath	0.02
## 4124	Fence	HalfBath	-0.09
## 4125	MiscFeature	HalfBath	-0.04
## 4126	MiscVal	HalfBath	0.00
## 4127	MoSold	HalfBath	-0.01
## 4128	YrSold	HalfBath	-0.01
## 4129	SaleType	HalfBath	0.03
## 4130	SaleCondition	HalfBath	0.07
## 4131	SalePrice	HalfBath	0.28
## 4132	Id	BedroomAbvGr	0.04
## 4133	MSSubClass	BedroomAbvGr	-0.02
## 4134	MSZoning	BedroomAbvGr	-0.02
## 4135	LotFrontage	BedroomAbvGr	0.14
## 4136	LotArea	BedroomAbvGr	0.12
## 4137	Street	BedroomAbvGr	0.03
## 4138	Alley	BedroomAbvGr	-0.01
## 4139	LotShape	BedroomAbvGr	-0.05
## 4140	LandContour	BedroomAbvGr	-0.04
## 4141	Utilities	BedroomAbvGr	0.00
## 4142	LotConfig	BedroomAbvGr	-0.06
## 4143	LandSlope	BedroomAbvGr	-0.05
## 4144	Neighborhood	BedroomAbvGr	0.06
## 4145	Condition1	BedroomAbvGr	0.01
## 4146	Condition2	BedroomAbvGr	-0.01
## 4147	BldgType	BedroomAbvGr	-0.28
## 4148	HouseStyle	BedroomAbvGr	0.18
## 4149	OverallQual	BedroomAbvGr	0.10
## 4150	OverallCond	BedroomAbvGr	0.01
## 4151	YearBuilt	BedroomAbvGr	-0.07
## 4152	YearRemodAdd	BedroomAbvGr	-0.04
## 4153	RoofStyle	BedroomAbvGr	0.02
## 4154	RoofMatl	BedroomAbvGr	-0.02
## 4155	Exterior1st	BedroomAbvGr	0.00
## 4156	Exterior2nd	BedroomAbvGr	0.01
## 4157	MasVnrType	BedroomAbvGr	-0.08
## 4158	MasVnrArea	BedroomAbvGr	0.10
## 4159	ExterQual	BedroomAbvGr	0.04
## 4160	ExterCond	BedroomAbvGr	-0.03
## 4161	Foundation	BedroomAbvGr	-0.01
## 4162	BsmtQual	BedroomAbvGr	0.08
## 4163	BsmtCond	BedroomAbvGr	-0.02
## 4164	BsmtExposure	BedroomAbvGr	0.11
## 4165	BsmtFinType1	BedroomAbvGr	0.11
## 4166	BsmtFinSF1	BedroomAbvGr	-0.11
## 4167	BsmtFinType2	BedroomAbvGr	0.01

## 4168	BsmtFinSF2	BedroomAbvGr	-0.02
## 4169	BsmtUnfSF	BedroomAbvGr	0.17
## 4170	TotalBsmtSF	BedroomAbvGr	0.05
## 4171	Heating	BedroomAbvGr	-0.02
## 4172	HeatingQC	BedroomAbvGr	0.05
## 4173	CentralAir	BedroomAbvGr	0.01
## 4174	Electrical	BedroomAbvGr	0.05
## 4175	X1stFlrSF	BedroomAbvGr	0.13
## 4176	X2ndFlrSF	BedroomAbvGr	0.50
## 4177	LowQualFinSF	BedroomAbvGr	0.11
## 4178	GrLivArea	BedroomAbvGr	0.52
## 4179	BsmtFullBath	BedroomAbvGr	-0.15
## 4180	BsmtHalfBath	BedroomAbvGr	0.05
## 4181	FullBath	BedroomAbvGr	0.36
## 4182	HalfBath	BedroomAbvGr	0.23
## 4183	BedroomAbvGr	BedroomAbvGr	1.00
## 4184	KitchenAbvGr	BedroomAbvGr	0.20
## 4185	KitchenQual	BedroomAbvGr	0.04
## 4186	TotRmsAbvGrd	BedroomAbvGr	0.68
## 4187	Functional	BedroomAbvGr	-0.02
## 4188	Fireplaces	BedroomAbvGr	0.11
## 4189	FireplaceQu	BedroomAbvGr	0.12
## 4190	GarageType	BedroomAbvGr	-0.02
## 4191	GarageYrBlt	BedroomAbvGr	-0.01
## 4192	GarageFinish	BedroomAbvGr	0.00
## 4193	GarageCars	BedroomAbvGr	0.09
## 4194	GarageArea	BedroomAbvGr	0.07
## 4195	GarageQual	BedroomAbvGr	0.00
## 4196	GarageCond	BedroomAbvGr	-0.01
## 4197	PavedDrive	BedroomAbvGr	-0.03
## 4198	WoodDeckSF	BedroomAbvGr	0.05
## 4199	OpenPorchSF	BedroomAbvGr	0.09
## 4200	EnclosedPorch	BedroomAbvGr	0.04
## 4201	X3SsnPorch	BedroomAbvGr	-0.02
## 4202	ScreenPorch	BedroomAbvGr	0.04
## 4203	PoolArea	BedroomAbvGr	0.07
## 4204	PoolQC	BedroomAbvGr	0.06
## 4205	Fence	BedroomAbvGr	0.01
## 4206	MiscFeature	BedroomAbvGr	0.01
## 4207	MiscVal	BedroomAbvGr	0.01
## 4208	MoSold	BedroomAbvGr	0.05
## 4209	YrSold	BedroomAbvGr	-0.04
## 4210	SaleType	BedroomAbvGr	0.04
## 4211	SaleCondition	BedroomAbvGr	-0.02
## 4212	SalePrice	BedroomAbvGr	0.17
## 4213	Id	KitchenAbvGr	0.00
## 4214	MSSubClass	KitchenAbvGr	0.28
## 4215	MSZoning	KitchenAbvGr	0.05
## 4216	LotFrontage	KitchenAbvGr	0.03
## 4217	LotArea	KitchenAbvGr	-0.02
## 4218	Street	KitchenAbvGr	0.01
## 4219	Alley	KitchenAbvGr	0.02
## 4220	LotShape	KitchenAbvGr	0.09
## 4221	LandContour	KitchenAbvGr	-0.04

##	4222	Utilities	KitchenAbvGr	-0.01
##	4223	LotConfig	KitchenAbvGr	0.00
##	4224	LandSlope	KitchenAbvGr	-0.04
##	4225	Neighborhood	KitchenAbvGr	0.07
##	4226	Condition1	KitchenAbvGr	-0.08
##	4227	Condition2	KitchenAbvGr	0.03
##	4228	BldgType	KitchenAbvGr	0.18
##	4229	HouseStyle	KitchenAbvGr	0.00
##	4230	OverallQual	KitchenAbvGr	-0.18
##	4231	OverallCond	KitchenAbvGr	-0.09
##	4232	YearBuilt	KitchenAbvGr	-0.17
##	4233	YearRemodAdd	KitchenAbvGr	-0.15
##	4234	RoofStyle	KitchenAbvGr	0.00
##	4235	RoofMatl	KitchenAbvGr	-0.03
##	4236	Exterior1st	KitchenAbvGr	-0.09
##	4237	Exterior2nd	KitchenAbvGr	-0.05
##	4238	MasVnrType	KitchenAbvGr	0.01
##	4239	MasVnrArea	KitchenAbvGr	-0.04
##	4240	ExterQual	KitchenAbvGr	0.10
##	4241	ExterCond	KitchenAbvGr	-0.01
##	4242	Foundation	KitchenAbvGr	-0.01
##	4243	BsmtQual	KitchenAbvGr	-0.07
##	4244	BsmtCond	KitchenAbvGr	-0.20
##	4245	BsmtExposure	KitchenAbvGr	-0.07
##	4246	BsmtFinType1	KitchenAbvGr	-0.01
##	4247	BsmtFinSF1	KitchenAbvGr	-0.08
##	4248	BsmtFinType2	KitchenAbvGr	-0.17
##	4249	BsmtFinSF2	KitchenAbvGr	-0.04
##	4250	BsmtUnfSF	KitchenAbvGr	0.03
##	4251	TotalBsmtSF	KitchenAbvGr	-0.07
##	4252	Heating	KitchenAbvGr	0.12
##	4253	HeatingQC	KitchenAbvGr	0.16
##	4254	CentralAir	KitchenAbvGr	-0.25
##	4255	Electrical	KitchenAbvGr	-0.13
##	4256	X1stFlrSF	KitchenAbvGr	0.07
##	4257	X2ndFlrSF	KitchenAbvGr	0.06
##	4258	LowQualFinSF	KitchenAbvGr	0.01
##	4259	GrLivArea	KitchenAbvGr	0.10
##	4260	BsmtFullBath	KitchenAbvGr	-0.04
##	4261	BsmtHalfBath	KitchenAbvGr	-0.04
##	4262	FullBath	KitchenAbvGr	0.13
##	4263	HalfBath	KitchenAbvGr	-0.07
##	4264	BedroomAbvGr	KitchenAbvGr	0.20
##	4265	KitchenAbvGr	KitchenAbvGr	1.00
##	4266	KitchenQual	KitchenAbvGr	0.12
##	4267	TotRmsAbvGrd	KitchenAbvGr	0.26
##	4268	Functional	KitchenAbvGr	-0.03
##	4269	Fireplaces	KitchenAbvGr	-0.12
##	4270	FireplaceQu	KitchenAbvGr	-0.13
##	4271	GarageType	KitchenAbvGr	0.05
##	4272	GarageYrBlt	KitchenAbvGr	-0.16
##	4273	GarageFinish	KitchenAbvGr	0.04
##	4274	GarageCars	KitchenAbvGr	-0.05
##	4275	GarageArea	KitchenAbvGr	-0.06

## 4276	GarageQual	KitchenAbvGr	-0.17
## 4277	GarageCond	KitchenAbvGr	-0.16
## 4278	PavedDrive	KitchenAbvGr	-0.17
## 4279	WoodDeckSF	KitchenAbvGr	-0.09
## 4280	OpenPorchSF	KitchenAbvGr	-0.07
## 4281	EnclosedPorch	KitchenAbvGr	0.04
## 4282	X3SsnPorch	KitchenAbvGr	-0.02
## 4283	ScreenPorch	KitchenAbvGr	-0.05
## 4284	PoolArea	KitchenAbvGr	-0.01
## 4285	PoolQC	KitchenAbvGr	-0.01
## 4286	Fence	KitchenAbvGr	-0.05
## 4287	MiscFeature	KitchenAbvGr	0.01
## 4288	MiscVal	KitchenAbvGr	0.06
## 4289	MoSold	KitchenAbvGr	0.03
## 4290	YrSold	KitchenAbvGr	0.03
## 4291	SaleType	KitchenAbvGr	-0.01
## 4292	SaleCondition	KitchenAbvGr	-0.07
## 4293	SalePrice	KitchenAbvGr	-0.14
## 4294	Id	KitchenQual	0.00
## 4295	MSSubClass	KitchenQual	0.01
## 4296	MSZoning	KitchenQual	0.13
## 4297	LotFrontage	KitchenQual	-0.17
## 4298	LotArea	KitchenQual	-0.06
## 4299	Street	KitchenQual	-0.03
## 4300	Alley	KitchenQual	0.00
## 4301	LotShape	KitchenQual	0.12
## 4302	LandContour	KitchenQual	0.03
## 4303	Utilities	KitchenQual	-0.01
## 4304	LotConfig	KitchenQual	-0.01
## 4305	LandSlope	KitchenQual	0.00
## 4306	Neighborhood	KitchenQual	-0.10
## 4307	Condition1	KitchenQual	-0.05
## 4308	Condition2	KitchenQual	-0.04
## 4309	BldgType	KitchenQual	-0.02
## 4310	HouseStyle	KitchenQual	-0.08
## 4311	OverallQual	KitchenQual	-0.56
## 4312	OverallCond	KitchenQual	0.07
## 4313	YearBuilt	KitchenQual	-0.36
## 4314	YearRemodAdd	KitchenQual	-0.45
## 4315	RoofStyle	KitchenQual	-0.12
## 4316	RoofMatl	KitchenQual	-0.04
## 4317	Exterior1st	KitchenQual	-0.12
## 4318	Exterior2nd	KitchenQual	-0.11
## 4319	MasVnrType	KitchenQual	-0.10
## 4320	MasVnrArea	KitchenQual	-0.26
## 4321	ExterQual	KitchenQual	0.64
## 4322	ExterCond	KitchenQual	-0.04
## 4323	Foundation	KitchenQual	-0.32
## 4324	BsmtQual	KitchenQual	0.40
## 4325	BsmtCond	KitchenQual	-0.04
## 4326	BsmtExposure	KitchenQual	0.15
## 4327	BsmtFinType1	KitchenQual	-0.05
## 4328	BsmtFinSF1	KitchenQual	-0.19
## 4329	BsmtFinType2	KitchenQual	-0.09

## 4330	BsmtFinSF2	KitchenQual	0.06
## 4331	BsmtUnfSF	KitchenQual	-0.20
## 4332	TotalBsmtSF	KitchenQual	-0.38
## 4333	Heating	KitchenQual	0.02
## 4334	HeatingQC	KitchenQual	0.39
## 4335	CentralAir	KitchenQual	-0.05
## 4336	Electrical	KitchenQual	-0.08
## 4337	X1stFlrSF	KitchenQual	-0.36
## 4338	X2ndFlrSF	KitchenQual	-0.14
## 4339	LowQualFinSF	KitchenQual	-0.01
## 4340	GrLivArea	KitchenQual	-0.38
## 4341	BsmtFullBath	KitchenQual	-0.12
## 4342	BsmtHalfBath	KitchenQual	0.03
## 4343	FullBath	KitchenQual	-0.34
## 4344	HalfBath	KitchenQual	-0.14
## 4345	BedroomAbvGr	KitchenQual	0.04
## 4346	KitchenAbvGr	KitchenQual	0.12
## 4347	KitchenQual	KitchenQual	1.00
## 4348	TotRmsAbvGrd	KitchenQual	-0.26
## 4349	Functional	KitchenQual	-0.07
## 4350	Fireplaces	KitchenQual	-0.23
## 4351	FireplaceQu	KitchenQual	-0.13
## 4352	GarageType	KitchenQual	0.16
## 4353	GarageYrBlt	KitchenQual	-0.07
## 4354	GarageFinish	KitchenQual	0.29
## 4355	GarageCars	KitchenQual	-0.37
## 4356	GarageArea	KitchenQual	-0.36
## 4357	GarageQual	KitchenQual	-0.05
## 4358	GarageCond	KitchenQual	-0.07
## 4359	PavedDrive	KitchenQual	-0.05
## 4360	WoodDeckSF	KitchenQual	-0.16
## 4361	OpenPorchSF	KitchenQual	-0.22
## 4362	EnclosedPorch	KitchenQual	0.07
## 4363	X3SsnPorch	KitchenQual	-0.01
## 4364	ScreenPorch	KitchenQual	-0.03
## 4365	PoolArea	KitchenQual	-0.06
## 4366	PoolQC	KitchenQual	-0.05
## 4367	Fence	KitchenQual	0.15
## 4368	MiscFeature	KitchenQual	0.07
## 4369	MiscVal	KitchenQual	0.04
## 4370	MoSold	KitchenQual	-0.04
## 4371	YrSold	KitchenQual	-0.01
## 4372	SaleType	KitchenQual	0.04
## 4373	SaleCondition	KitchenQual	-0.13
## 4374	SalePrice	KitchenQual	-0.59
## 4375	Id	TotRmsAbvGrd	0.03
## 4376	MSSubClass	TotRmsAbvGrd	0.04
## 4377	MSZoning	TotRmsAbvGrd	-0.04
## 4378	LotFrontage	TotRmsAbvGrd	0.22
## 4379	LotArea	TotRmsAbvGrd	0.19
## 4380	Street	TotRmsAbvGrd	0.05
## 4381	Alley	TotRmsAbvGrd	-0.04
## 4382	LotShape	TotRmsAbvGrd	-0.12
## 4383	LandContour	TotRmsAbvGrd	-0.05

## 4384	Utilities	TotRmsAbvGrd	0.01
## 4385	LotConfig	TotRmsAbvGrd	-0.05
## 4386	LandSlope	TotRmsAbvGrd	-0.03
## 4387	Neighborhood	TotRmsAbvGrd	0.11
## 4388	Condition1	TotRmsAbvGrd	0.05
## 4389	Condition2	TotRmsAbvGrd	0.02
## 4390	BldgType	TotRmsAbvGrd	-0.20
## 4391	HouseStyle	TotRmsAbvGrd	0.25
## 4392	OverallQual	TotRmsAbvGrd	0.43
## 4393	OverallCond	TotRmsAbvGrd	-0.06
## 4394	YearBuilt	TotRmsAbvGrd	0.10
## 4395	YearRemodAdd	TotRmsAbvGrd	0.19
## 4396	RoofStyle	TotRmsAbvGrd	0.15
## 4397	RoofMatl	TotRmsAbvGrd	0.05
## 4398	Exterior1st	TotRmsAbvGrd	0.07
## 4399	Exterior2nd	TotRmsAbvGrd	0.07
## 4400	MasVnrType	TotRmsAbvGrd	-0.02
## 4401	MasVnrArea	TotRmsAbvGrd	0.28
## 4402	ExterQual	TotRmsAbvGrd	-0.29
## 4403	ExterCond	TotRmsAbvGrd	0.03
## 4404	Foundation	TotRmsAbvGrd	0.15
## 4405	BsmtQual	TotRmsAbvGrd	-0.20
## 4406	BsmtCond	TotRmsAbvGrd	-0.01
## 4407	BsmtExposure	TotRmsAbvGrd	0.00
## 4408	BsmtFinType1	TotRmsAbvGrd	0.14
## 4409	BsmtFinSF1	TotRmsAbvGrd	0.04
## 4410	BsmtFinType2	TotRmsAbvGrd	0.03
## 4411	BsmtFinSF2	TotRmsAbvGrd	-0.04
## 4412	BsmtUnfSF	TotRmsAbvGrd	0.25
## 4413	TotalBsmtSF	TotRmsAbvGrd	0.29
## 4414	Heating	TotRmsAbvGrd	0.00
## 4415	HeatingQC	TotRmsAbvGrd	-0.16
## 4416	CentralAir	TotRmsAbvGrd	0.03
## 4417	Electrical	TotRmsAbvGrd	0.08
## 4418	X1stFlrSF	TotRmsAbvGrd	0.41
## 4419	X2ndFlrSF	TotRmsAbvGrd	0.62
## 4420	LowQualFinSF	TotRmsAbvGrd	0.13
## 4421	GrLivArea	TotRmsAbvGrd	0.83
## 4422	BsmtFullBath	TotRmsAbvGrd	-0.05
## 4423	BsmtHalfBath	TotRmsAbvGrd	-0.02
## 4424	FullBath	TotRmsAbvGrd	0.55
## 4425	HalfBath	TotRmsAbvGrd	0.34
## 4426	BedroomAbvGr	TotRmsAbvGrd	0.68
## 4427	KitchenAbvGr	TotRmsAbvGrd	0.26
## 4428	KitchenQual	TotRmsAbvGrd	-0.26
## 4429	TotRmsAbvGrd	TotRmsAbvGrd	1.00
## 4430	Functional	TotRmsAbvGrd	-0.05
## 4431	Fireplaces	TotRmsAbvGrd	0.33
## 4432	FireplaceQu	TotRmsAbvGrd	0.30
## 4433	GarageType	TotRmsAbvGrd	-0.06
## 4434	GarageYrBlt	TotRmsAbvGrd	0.10
## 4435	GarageFinish	TotRmsAbvGrd	-0.14
## 4436	GarageCars	TotRmsAbvGrd	0.36
## 4437	GarageArea	TotRmsAbvGrd	0.34

## 4438	GarageQual	TotRmsAbvGrd	0.08
## 4439	GarageCond	TotRmsAbvGrd	0.09
## 4440	PavedDrive	TotRmsAbvGrd	0.00
## 4441	WoodDeckSF	TotRmsAbvGrd	0.17
## 4442	OpenPorchSF	TotRmsAbvGrd	0.23
## 4443	EnclosedPorch	TotRmsAbvGrd	0.00
## 4444	X3SsnPorch	TotRmsAbvGrd	-0.01
## 4445	ScreenPorch	TotRmsAbvGrd	0.06
## 4446	PoolArea	TotRmsAbvGrd	0.08
## 4447	PoolQC	TotRmsAbvGrd	0.09
## 4448	Fence	TotRmsAbvGrd	-0.09
## 4449	MiscFeature	TotRmsAbvGrd	-0.02
## 4450	MiscVal	TotRmsAbvGrd	0.02
## 4451	MoSold	TotRmsAbvGrd	0.04
## 4452	YrSold	TotRmsAbvGrd	-0.03
## 4453	SaleType	TotRmsAbvGrd	-0.04
## 4454	SaleCondition	TotRmsAbvGrd	0.07
## 4455	SalePrice	TotRmsAbvGrd	0.53
## 4456	Id	Functional	0.00
## 4457	MSSubClass	Functional	0.00
## 4458	MSZoning	Functional	-0.10
## 4459	LotFrontage	Functional	0.01
## 4460	LotArea	Functional	-0.02
## 4461	Street	Functional	-0.02
## 4462	Alley	Functional	-0.01
## 4463	LotShape	Functional	-0.03
## 4464	LandContour	Functional	0.04
## 4465	Utilities	Functional	0.01
## 4466	LotConfig	Functional	-0.02
## 4467	LandSlope	Functional	-0.11
## 4468	Neighborhood	Functional	0.03
## 4469	Condition1	Functional	-0.01
## 4470	Condition2	Functional	0.01
## 4471	BldgType	Functional	0.01
## 4472	HouseStyle	Functional	0.05
## 4473	OverallQual	Functional	0.16
## 4474	OverallCond	Functional	0.09
## 4475	YearBuilt	Functional	0.15
## 4476	YearRemodAdd	Functional	0.08
## 4477	RoofStyle	Functional	-0.02
## 4478	RoofMatl	Functional	-0.03
## 4479	Exterior1st	Functional	0.03
## 4480	Exterior2nd	Functional	0.01
## 4481	MasVnrType	Functional	-0.04
## 4482	MasVnrArea	Functional	0.09
## 4483	ExterQual	Functional	-0.05
## 4484	ExterCond	Functional	0.04
## 4485	Foundation	Functional	0.11
## 4486	BsmtQual	Functional	-0.01
## 4487	BsmtCond	Functional	0.09
## 4488	BsmtExposure	Functional	-0.03
## 4489	BsmtFinType1	Functional	0.01
## 4490	BsmtFinSF1	Functional	0.04
## 4491	BsmtFinType2	Functional	0.13

## 4492	BsmtFinSF2	Functional	-0.10
## 4493	BsmtUnfSF	Functional	0.05
## 4494	TotalBsmtSF	Functional	0.06
## 4495	Heating	Functional	-0.05
## 4496	HeatingQC	Functional	-0.07
## 4497	CentralAir	Functional	0.07
## 4498	Electrical	Functional	0.05
## 4499	X1stFlrSF	Functional	-0.08
## 4500	X2ndFlrSF	Functional	0.02
## 4501	LowQualFinSF	Functional	-0.07
## 4502	GrLivArea	Functional	-0.05
## 4503	BsmtFullBath	Functional	0.02
## 4504	BsmtHalfBath	Functional	-0.02
## 4505	FullBath	Functional	0.02
## 4506	HalfBath	Functional	0.08
## 4507	BedroomAbvGr	Functional	-0.02
## 4508	KitchenAbvGr	Functional	-0.03
## 4509	KitchenQual	Functional	-0.07
## 4510	TotRmsAbvGrd	Functional	-0.05
## 4511	Functional	Functional	1.00
## 4512	Fireplaces	Functional	-0.02
## 4513	FireplaceQu	Functional	-0.03
## 4514	GarageType	Functional	-0.06
## 4515	GarageYrBlt	Functional	0.05
## 4516	GarageFinish	Functional	-0.07
## 4517	GarageCars	Functional	0.09
## 4518	GarageArea	Functional	0.08
## 4519	GarageQual	Functional	0.05
## 4520	GarageCond	Functional	0.04
## 4521	PavedDrive	Functional	0.05
## 4522	WoodDeckSF	Functional	-0.01
## 4523	OpenPorchSF	Functional	0.07
## 4524	EnclosedPorch	Functional	-0.04
## 4525	X3SsnPorch	Functional	0.02
## 4526	ScreenPorch	Functional	-0.01
## 4527	PoolArea	Functional	0.02
## 4528	PoolQC	Functional	0.02
## 4529	Fence	Functional	-0.07
## 4530	MiscFeature	Functional	-0.06
## 4531	MiscVal	Functional	-0.02
## 4532	MoSold	Functional	0.03
## 4533	YrSold	Functional	-0.02
## 4534	SaleType	Functional	-0.01
## 4535	SaleCondition	Functional	0.02
## 4536	SalePrice	Functional	0.12
## 4537	Id	Fireplaces	-0.02
## 4538	MSSubClass	Fireplaces	-0.05
## 4539	MSZoning	Fireplaces	-0.01
## 4540	LotFrontage	Fireplaces	0.04
## 4541	LotArea	Fireplaces	0.27
## 4542	Street	Fireplaces	-0.01
## 4543	Alley	Fireplaces	-0.11
## 4544	LotShape	Fireplaces	-0.19
## 4545	LandContour	Fireplaces	-0.05

## 4546	Utilities	Fireplaces	0.02
## 4547	LotConfig	Fireplaces	-0.06
## 4548	LandSlope	Fireplaces	0.12
## 4549	Neighborhood	Fireplaces	0.06
## 4550	Condition1	Fireplaces	0.01
## 4551	Condition2	Fireplaces	-0.01
## 4552	BldgType	Fireplaces	-0.09
## 4553	HouseStyle	Fireplaces	0.10
## 4554	OverallQual	Fireplaces	0.40
## 4555	OverallCond	Fireplaces	-0.02
## 4556	YearBuilt	Fireplaces	0.15
## 4557	YearRemodAdd	Fireplaces	0.11
## 4558	RoofStyle	Fireplaces	0.12
## 4559	RoofMatl	Fireplaces	0.09
## 4560	Exterior1st	Fireplaces	0.01
## 4561	Exterior2nd	Fireplaces	0.02
## 4562	MasVnrType	Fireplaces	-0.05
## 4563	MasVnrArea	Fireplaces	0.25
## 4564	ExterQual	Fireplaces	-0.22
## 4565	ExterCond	Fireplaces	0.04
## 4566	Foundation	Fireplaces	0.07
## 4567	BsmtQual	Fireplaces	-0.12
## 4568	BsmtCond	Fireplaces	0.08
## 4569	BsmtExposure	Fireplaces	-0.06
## 4570	BsmtFinType1	Fireplaces	-0.06
## 4571	BsmtFinSF1	Fireplaces	0.26
## 4572	BsmtFinType2	Fireplaces	0.04
## 4573	BsmtFinSF2	Fireplaces	0.05
## 4574	BsmtUnfSF	Fireplaces	0.05
## 4575	TotalBsmtSF	Fireplaces	0.34
## 4576	Heating	Fireplaces	-0.05
## 4577	HeatingQC	Fireplaces	-0.12
## 4578	CentralAir	Fireplaces	0.19
## 4579	Electrical	Fireplaces	0.12
## 4580	X1stFlrSF	Fireplaces	0.41
## 4581	X2ndFlrSF	Fireplaces	0.19
## 4582	LowQualFinSF	Fireplaces	-0.02
## 4583	GrLivArea	Fireplaces	0.46
## 4584	BsmtFullBath	Fireplaces	0.14
## 4585	BsmtHalfBath	Fireplaces	0.03
## 4586	FullBath	Fireplaces	0.24
## 4587	HalfBath	Fireplaces	0.20
## 4588	BedroomAbvGr	Fireplaces	0.11
## 4589	KitchenAbvGr	Fireplaces	-0.12
## 4590	KitchenQual	Fireplaces	-0.23
## 4591	TotRmsAbvGrd	Fireplaces	0.33
## 4592	Functional	Fireplaces	-0.02
## 4593	Fireplaces	Fireplaces	1.00
## 4594	FireplaceQu	Fireplaces	0.82
## 4595	GarageType	Fireplaces	-0.16
## 4596	GarageYrBlt	Fireplaces	0.19
## 4597	GarageFinish	Fireplaces	-0.13
## 4598	GarageCars	Fireplaces	0.30
## 4599	GarageArea	Fireplaces	0.27

## 4600	GarageQual	Fireplaces	0.18
## 4601	GarageCond	Fireplaces	0.21
## 4602	PavedDrive	Fireplaces	0.14
## 4603	WoodDeckSF	Fireplaces	0.20
## 4604	OpenPorchSF	Fireplaces	0.17
## 4605	EnclosedPorch	Fireplaces	-0.02
## 4606	X3SsnPorch	Fireplaces	0.01
## 4607	ScreenPorch	Fireplaces	0.18
## 4608	PoolArea	Fireplaces	0.10
## 4609	PoolQC	Fireplaces	0.10
## 4610	Fence	Fireplaces	-0.06
## 4611	MiscFeature	Fireplaces	0.00
## 4612	MiscVal	Fireplaces	0.00
## 4613	MoSold	Fireplaces	0.05
## 4614	YrSold	Fireplaces	-0.02
## 4615	SaleType	Fireplaces	0.02
## 4616	SaleCondition	Fireplaces	0.11
## 4617	SalePrice	Fireplaces	0.47
## 4618	Id	FireplaceQu	0.00
## 4619	MSSubClass	FireplaceQu	-0.01
## 4620	MSZoning	FireplaceQu	-0.02
## 4621	LotFrontage	FireplaceQu	0.00
## 4622	LotArea	FireplaceQu	0.16
## 4623	Street	FireplaceQu	0.02
## 4624	Alley	FireplaceQu	-0.11
## 4625	LotShape	FireplaceQu	-0.21
## 4626	LandContour	FireplaceQu	-0.01
## 4627	Utilities	FireplaceQu	0.01
## 4628	LotConfig	FireplaceQu	-0.05
## 4629	LandSlope	FireplaceQu	0.07
## 4630	Neighborhood	FireplaceQu	0.05
## 4631	Condition1	FireplaceQu	0.03
## 4632	Condition2	FireplaceQu	0.00
## 4633	BldgType	FireplaceQu	-0.07
## 4634	HouseStyle	FireplaceQu	0.16
## 4635	OverallQual	FireplaceQu	0.35
## 4636	OverallCond	FireplaceQu	-0.06
## 4637	YearBuilt	FireplaceQu	0.21
## 4638	YearRemodAdd	FireplaceQu	0.13
## 4639	RoofStyle	FireplaceQu	0.09
## 4640	RoofMatl	FireplaceQu	0.06
## 4641	Exterior1st	FireplaceQu	0.02
## 4642	Exterior2nd	FireplaceQu	0.01
## 4643	MasVnrType	FireplaceQu	-0.13
## 4644	MasVnrArea	FireplaceQu	0.22
## 4645	ExterQual	FireplaceQu	-0.17
## 4646	ExterCond	FireplaceQu	0.05
## 4647	Foundation	FireplaceQu	0.10
## 4648	BsmtQual	FireplaceQu	-0.09
## 4649	BsmtCond	FireplaceQu	0.08
## 4650	BsmtExposure	FireplaceQu	-0.01
## 4651	BsmtFinType1	FireplaceQu	-0.04
## 4652	BsmtFinSF1	FireplaceQu	0.15
## 4653	BsmtFinType2	FireplaceQu	0.05

## 4654	BsmtFinSF2	FireplaceQu	0.04
## 4655	BsmtUnfSF	FireplaceQu	0.05
## 4656	TotalBsmtSF	FireplaceQu	0.23
## 4657	Heating	FireplaceQu	-0.06
## 4658	HeatingQC	FireplaceQu	-0.10
## 4659	CentralAir	FireplaceQu	0.19
## 4660	Electrical	FireplaceQu	0.15
## 4661	X1stFlrSF	FireplaceQu	0.30
## 4662	X2ndFlrSF	FireplaceQu	0.23
## 4663	LowQualFinSF	FireplaceQu	-0.04
## 4664	GrLivArea	FireplaceQu	0.40
## 4665	BsmtFullBath	FireplaceQu	0.08
## 4666	BsmtHalfBath	FireplaceQu	0.03
## 4667	FullBath	FireplaceQu	0.28
## 4668	HalfBath	FireplaceQu	0.24
## 4669	BedroomAbvGr	FireplaceQu	0.12
## 4670	KitchenAbvGr	FireplaceQu	-0.13
## 4671	KitchenQual	FireplaceQu	-0.13
## 4672	TotRmsAbvGrd	FireplaceQu	0.30
## 4673	Functional	FireplaceQu	-0.03
## 4674	Fireplaces	FireplaceQu	0.82
## 4675	FireplaceQu	FireplaceQu	1.00
## 4676	GarageType	FireplaceQu	-0.18
## 4677	GarageYrBlt	FireplaceQu	0.19
## 4678	GarageFinish	FireplaceQu	-0.15
## 4679	GarageCars	FireplaceQu	0.31
## 4680	GarageArea	FireplaceQu	0.25
## 4681	GarageQual	FireplaceQu	0.19
## 4682	GarageCond	FireplaceQu	0.21
## 4683	PavedDrive	FireplaceQu	0.15
## 4684	WoodDeckSF	FireplaceQu	0.19
## 4685	OpenPorchSF	FireplaceQu	0.17
## 4686	EnclosedPorch	FireplaceQu	-0.04
## 4687	X3SsnPorch	FireplaceQu	0.02
## 4688	ScreenPorch	FireplaceQu	0.14
## 4689	PoolArea	FireplaceQu	0.04
## 4690	PoolQC	FireplaceQu	0.04
## 4691	Fence	FireplaceQu	-0.07
## 4692	MiscFeature	FireplaceQu	0.01
## 4693	MiscVal	FireplaceQu	0.01
## 4694	MoSold	FireplaceQu	0.04
## 4695	YrSold	FireplaceQu	-0.04
## 4696	SaleType	FireplaceQu	0.05
## 4697	SaleCondition	FireplaceQu	0.10
## 4698	SalePrice	FireplaceQu	0.38
## 4699	Id	GarageType	0.00
## 4700	MSSubClass	GarageType	0.06
## 4701	MSZoning	GarageType	0.09
## 4702	LotFrontage	GarageType	-0.07
## 4703	LotArea	GarageType	-0.09
## 4704	Street	GarageType	0.01
## 4705	Alley	GarageType	0.21
## 4706	LotShape	GarageType	0.14
## 4707	LandContour	GarageType	-0.06

## 4708	Utilities	GarageType	0.00
## 4709	LotConfig	GarageType	0.00
## 4710	LandSlope	GarageType	0.00
## 4711	Neighborhood	GarageType	-0.02
## 4712	Condition1	GarageType	-0.02
## 4713	Condition2	GarageType	0.05
## 4714	BldgType	GarageType	-0.02
## 4715	HouseStyle	GarageType	-0.06
## 4716	OverallQual	GarageType	-0.21
## 4717	OverallCond	GarageType	0.15
## 4718	YearBuilt	GarageType	-0.36
## 4719	YearRemodAdd	GarageType	-0.23
## 4720	RoofStyle	GarageType	-0.04
## 4721	RoofMatl	GarageType	-0.03
## 4722	Exterior1st	GarageType	0.00
## 4723	Exterior2nd	GarageType	0.01
## 4724	MasVnrType	GarageType	0.10
## 4725	MasVnrArea	GarageType	-0.12
## 4726	ExterQual	GarageType	0.19
## 4727	ExterCond	GarageType	-0.05
## 4728	Foundation	GarageType	-0.25
## 4729	BsmtQual	GarageType	0.12
## 4730	BsmtCond	GarageType	-0.08
## 4731	BsmtExposure	GarageType	0.13
## 4732	BsmtFinType1	GarageType	0.09
## 4733	BsmtFinSF1	GarageType	-0.19
## 4734	BsmtFinType2	GarageType	-0.04
## 4735	BsmtFinSF2	GarageType	-0.02
## 4736	BsmtUnfSF	GarageType	-0.06
## 4737	TotalBsmtSF	GarageType	-0.27
## 4738	Heating	GarageType	0.08
## 4739	HeatingQC	GarageType	0.13
## 4740	CentralAir	GarageType	-0.12
## 4741	Electrical	GarageType	-0.12
## 4742	X1stFlrSF	GarageType	-0.26
## 4743	X2ndFlrSF	GarageType	0.09
## 4744	LowQualFinSF	GarageType	0.04
## 4745	GrLivArea	GarageType	-0.11
## 4746	BsmtFullBath	GarageType	-0.14
## 4747	BsmtHalfBath	GarageType	-0.01
## 4748	FullBath	GarageType	-0.21
## 4749	HalfBath	GarageType	-0.05
## 4750	BedroomAbvGr	GarageType	-0.02
## 4751	KitchenAbvGr	GarageType	0.05
## 4752	KitchenQual	GarageType	0.16
## 4753	TotRmsAbvGrd	GarageType	-0.06
## 4754	Functional	GarageType	-0.06
## 4755	Fireplaces	GarageType	-0.16
## 4756	FireplaceQu	GarageType	-0.18
## 4757	GarageType	GarageType	1.00
## 4758	GarageYrBlt	GarageType	0.38
## 4759	GarageFinish	GarageType	0.58
## 4760	GarageCars	GarageType	0.03
## 4761	GarageArea	GarageType	0.03

## 4762	GarageQual	GarageType	0.26
## 4763	GarageCond	GarageType	0.28
## 4764	PavedDrive	GarageType	-0.08
## 4765	WoodDeckSF	GarageType	-0.15
## 4766	OpenPorchSF	GarageType	-0.10
## 4767	EnclosedPorch	GarageType	0.14
## 4768	X3SsnPorch	GarageType	-0.04
## 4769	ScreenPorch	GarageType	-0.01
## 4770	PoolArea	GarageType	-0.02
## 4771	PoolQC	GarageType	-0.03
## 4772	Fence	GarageType	0.07
## 4773	MiscFeature	GarageType	0.01
## 4774	MiscVal	GarageType	-0.01
## 4775	MoSold	GarageType	0.01
## 4776	YrSold	GarageType	0.00
## 4777	SaleType	GarageType	0.02
## 4778	SaleCondition	GarageType	-0.04
## 4779	SalePrice	GarageType	-0.22
## 4780	Id	GarageYrBlt	0.01
## 4781	MSSubClass	GarageYrBlt	-0.08
## 4782	MSZoning	GarageYrBlt	-0.07
## 4783	LotFrontage	GarageYrBlt	0.02
## 4784	LotArea	GarageYrBlt	0.07
## 4785	Street	GarageYrBlt	0.03
## 4786	Alley	GarageYrBlt	-0.03
## 4787	LotShape	GarageYrBlt	-0.08
## 4788	LandContour	GarageYrBlt	0.07
## 4789	Utilities	GarageYrBlt	0.01
## 4790	LotConfig	GarageYrBlt	-0.03
## 4791	LandSlope	GarageYrBlt	-0.01
## 4792	Neighborhood	GarageYrBlt	0.08
## 4793	Condition1	GarageYrBlt	0.09
## 4794	Condition2	GarageYrBlt	0.02
## 4795	BldgType	GarageYrBlt	-0.02
## 4796	HouseStyle	GarageYrBlt	0.09
## 4797	OverallQual	GarageYrBlt	0.29
## 4798	OverallCond	GarageYrBlt	-0.01
## 4799	YearBuilt	GarageYrBlt	0.27
## 4800	YearRemodAdd	GarageYrBlt	0.15
## 4801	RoofStyle	GarageYrBlt	0.06
## 4802	RoofMatl	GarageYrBlt	0.01
## 4803	Exterior1st	GarageYrBlt	0.03
## 4804	Exterior2nd	GarageYrBlt	0.03
## 4805	MasVnrType	GarageYrBlt	-0.07
## 4806	MasVnrArea	GarageYrBlt	0.13
## 4807	ExterQual	GarageYrBlt	-0.12
## 4808	ExterCond	GarageYrBlt	0.13
## 4809	Foundation	GarageYrBlt	0.14
## 4810	BsmtQual	GarageYrBlt	-0.07
## 4811	BsmtCond	GarageYrBlt	0.11
## 4812	BsmtExposure	GarageYrBlt	-0.01
## 4813	BsmtFinType1	GarageYrBlt	-0.03
## 4814	BsmtFinSF1	GarageYrBlt	0.12
## 4815	BsmtFinType2	GarageYrBlt	0.05

## 4816	BsmtFinSF2	GarageYrBlt	0.04
## 4817	BsmtUnfSF	GarageYrBlt	0.04
## 4818	TotalBsmtSF	GarageYrBlt	0.18
## 4819	Heating	GarageYrBlt	-0.10
## 4820	HeatingQC	GarageYrBlt	-0.11
## 4821	CentralAir	GarageYrBlt	0.27
## 4822	Electrical	GarageYrBlt	0.14
## 4823	X1stFlrSF	GarageYrBlt	0.17
## 4824	X2ndFlrSF	GarageYrBlt	0.06
## 4825	LowQualFinSF	GarageYrBlt	-0.15
## 4826	GrLivArea	GarageYrBlt	0.16
## 4827	BsmtFullBath	GarageYrBlt	0.05
## 4828	BsmtHalfBath	GarageYrBlt	0.02
## 4829	FullBath	GarageYrBlt	0.14
## 4830	HalfBath	GarageYrBlt	0.12
## 4831	BedroomAbvGr	GarageYrBlt	-0.01
## 4832	KitchenAbvGr	GarageYrBlt	-0.16
## 4833	KitchenQual	GarageYrBlt	-0.07
## 4834	TotRmsAbvGrd	GarageYrBlt	0.10
## 4835	Functional	GarageYrBlt	0.05
## 4836	Fireplaces	GarageYrBlt	0.19
## 4837	FireplaceQu	GarageYrBlt	0.19
## 4838	GarageType	GarageYrBlt	0.38
## 4839	GarageYrBlt	GarageYrBlt	1.00
## 4840	GarageFinish	GarageYrBlt	0.51
## 4841	GarageCars	GarageYrBlt	0.60
## 4842	GarageArea	GarageYrBlt	0.56
## 4843	GarageQual	GarageYrBlt	0.89
## 4844	GarageCond	GarageYrBlt	0.92
## 4845	PavedDrive	GarageYrBlt	0.34
## 4846	WoodDeckSF	GarageYrBlt	0.12
## 4847	OpenPorchSF	GarageYrBlt	0.05
## 4848	EnclosedPorch	GarageYrBlt	-0.08
## 4849	X3SsnPorch	GarageYrBlt	0.03
## 4850	ScreenPorch	GarageYrBlt	0.06
## 4851	PoolArea	GarageYrBlt	0.02
## 4852	PoolQC	GarageYrBlt	0.02
## 4853	Fence	GarageYrBlt	-0.02
## 4854	MiscFeature	GarageYrBlt	0.00
## 4855	MiscVal	GarageYrBlt	-0.01
## 4856	MoSold	GarageYrBlt	0.02
## 4857	YrSold	GarageYrBlt	-0.01
## 4858	SaleType	GarageYrBlt	-0.03
## 4859	SaleCondition	GarageYrBlt	0.14
## 4860	SalePrice	GarageYrBlt	0.26
## 4861	Id	GarageFinish	0.00
## 4862	MSSubClass	GarageFinish	-0.05
## 4863	MSZoning	GarageFinish	0.10
## 4864	LotFrontage	GarageFinish	-0.07
## 4865	LotArea	GarageFinish	-0.05
## 4866	Street	GarageFinish	0.02
## 4867	Alley	GarageFinish	0.09
## 4868	LotShape	GarageFinish	0.15
## 4869	LandContour	GarageFinish	-0.02

## 4870	Utilities	GarageFinish	0.00
## 4871	LotConfig	GarageFinish	0.00
## 4872	LandSlope	GarageFinish	0.01
## 4873	Neighborhood	GarageFinish	0.02
## 4874	Condition1	GarageFinish	-0.06
## 4875	Condition2	GarageFinish	0.01
## 4876	BldgType	GarageFinish	-0.07
## 4877	HouseStyle	GarageFinish	-0.13
## 4878	OverallQual	GarageFinish	-0.28
## 4879	OverallCond	GarageFinish	0.17
## 4880	YearBuilt	GarageFinish	-0.34
## 4881	YearRemodAdd	GarageFinish	-0.31
## 4882	RoofStyle	GarageFinish	-0.07
## 4883	RoofMatl	GarageFinish	-0.02
## 4884	Exterior1st	GarageFinish	-0.07
## 4885	Exterior2nd	GarageFinish	-0.05
## 4886	MasVnrType	GarageFinish	0.01
## 4887	MasVnrArea	GarageFinish	-0.15
## 4888	ExterQual	GarageFinish	0.33
## 4889	ExterCond	GarageFinish	-0.05
## 4890	Foundation	GarageFinish	-0.27
## 4891	BsmtQual	GarageFinish	0.25
## 4892	BsmtCond	GarageFinish	-0.04
## 4893	BsmtExposure	GarageFinish	0.13
## 4894	BsmtFinType1	GarageFinish	-0.02
## 4895	BsmtFinSF1	GarageFinish	-0.13
## 4896	BsmtFinType2	GarageFinish	-0.06
## 4897	BsmtFinSF2	GarageFinish	0.05
## 4898	BsmtUnfSF	GarageFinish	-0.08
## 4899	TotalBsmtSF	GarageFinish	-0.20
## 4900	Heating	GarageFinish	0.03
## 4901	HeatingQC	GarageFinish	0.27
## 4902	CentralAir	GarageFinish	-0.02
## 4903	Electrical	GarageFinish	-0.11
## 4904	X1stFlrSF	GarageFinish	-0.17
## 4905	X2ndFlrSF	GarageFinish	-0.08
## 4906	LowQualFinSF	GarageFinish	-0.03
## 4907	GrLivArea	GarageFinish	-0.19
## 4908	BsmtFullBath	GarageFinish	-0.11
## 4909	BsmtHalfBath	GarageFinish	0.05
## 4910	FullBath	GarageFinish	-0.28
## 4911	HalfBath	GarageFinish	-0.13
## 4912	BedroomAbvGr	GarageFinish	0.00
## 4913	KitchenAbvGr	GarageFinish	0.04
## 4914	KitchenQual	GarageFinish	0.29
## 4915	TotRmsAbvGrd	GarageFinish	-0.14
## 4916	Functional	GarageFinish	-0.07
## 4917	Fireplaces	GarageFinish	-0.13
## 4918	FireplaceQu	GarageFinish	-0.15
## 4919	GarageType	GarageFinish	0.58
## 4920	GarageYrBlt	GarageFinish	0.51
## 4921	GarageFinish	GarageFinish	1.00
## 4922	GarageCars	GarageFinish	0.01
## 4923	GarageArea	GarageFinish	0.03

## 4924	GarageQual	GarageFinish	0.40
## 4925	GarageCond	GarageFinish	0.44
## 4926	PavedDrive	GarageFinish	0.04
## 4927	WoodDeckSF	GarageFinish	-0.14
## 4928	OpenPorchSF	GarageFinish	-0.16
## 4929	EnclosedPorch	GarageFinish	0.12
## 4930	X3SsnPorch	GarageFinish	-0.01
## 4931	ScreenPorch	GarageFinish	0.02
## 4932	PoolArea	GarageFinish	-0.01
## 4933	PoolQC	GarageFinish	-0.02
## 4934	Fence	GarageFinish	0.13
## 4935	MiscFeature	GarageFinish	0.03
## 4936	MiscVal	GarageFinish	0.00
## 4937	MoSold	GarageFinish	0.02
## 4938	YrSold	GarageFinish	-0.01
## 4939	SaleType	GarageFinish	0.02
## 4940	SaleCondition	GarageFinish	-0.05
## 4941	SalePrice	GarageFinish	-0.29
## 4942	Id	GarageCars	0.02
## 4943	MSSubClass	GarageCars	-0.04
## 4944	MSZoning	GarageCars	-0.16
## 4945	LotFrontage	GarageCars	0.17
## 4946	LotArea	GarageCars	0.15
## 4947	Street	GarageCars	-0.02
## 4948	Alley	GarageCars	-0.05
## 4949	LotShape	GarageCars	-0.18
## 4950	LandContour	GarageCars	0.05
## 4951	Utilities	GarageCars	0.01
## 4952	LotConfig	GarageCars	-0.07
## 4953	LandSlope	GarageCars	0.00
## 4954	Neighborhood	GarageCars	0.16
## 4955	Condition1	GarageCars	0.10
## 4956	Condition2	GarageCars	0.02
## 4957	BldgType	GarageCars	0.01
## 4958	HouseStyle	GarageCars	0.20
## 4959	OverallQual	GarageCars	0.60
## 4960	OverallCond	GarageCars	-0.19
## 4961	YearBuilt	GarageCars	0.54
## 4962	YearRemodAdd	GarageCars	0.42
## 4963	RoofStyle	GarageCars	0.13
## 4964	RoofMatl	GarageCars	0.04
## 4965	Exterior1st	GarageCars	0.12
## 4966	Exterior2nd	GarageCars	0.12
## 4967	MasVnrType	GarageCars	-0.04
## 4968	MasVnrArea	GarageCars	0.36
## 4969	ExterQual	GarageCars	-0.45
## 4970	ExterCond	GarageCars	0.18
## 4971	Foundation	GarageCars	0.38
## 4972	BsmtQual	GarageCars	-0.37
## 4973	BsmtCond	GarageCars	0.10
## 4974	BsmtExposure	GarageCars	-0.17
## 4975	BsmtFinType1	GarageCars	0.01
## 4976	BsmtFinSF1	GarageCars	0.22
## 4977	BsmtFinType2	GarageCars	0.08

## 4978	BsmtFinSF2	GarageCars	-0.04
## 4979	BsmtUnfSF	GarageCars	0.21
## 4980	TotalBsmtSF	GarageCars	0.43
## 4981	Heating	GarageCars	-0.07
## 4982	HeatingQC	GarageCars	-0.30
## 4983	CentralAir	GarageCars	0.23
## 4984	Electrical	GarageCars	0.24
## 4985	X1stFlrSF	GarageCars	0.44
## 4986	X2ndFlrSF	GarageCars	0.18
## 4987	LowQualFinSF	GarageCars	-0.09
## 4988	GrLivArea	GarageCars	0.47
## 4989	BsmtFullBath	GarageCars	0.13
## 4990	BsmtHalfBath	GarageCars	-0.02
## 4991	FullBath	GarageCars	0.47
## 4992	HalfBath	GarageCars	0.22
## 4993	BedroomAbvGr	GarageCars	0.09
## 4994	KitchenAbvGr	GarageCars	-0.05
## 4995	KitchenQual	GarageCars	-0.37
## 4996	TotRmsAbvGrd	GarageCars	0.36
## 4997	Functional	GarageCars	0.09
## 4998	Fireplaces	GarageCars	0.30
## 4999	FireplaceQu	GarageCars	0.31
## 5000	GarageType	GarageCars	0.03
## 5001	GarageYrBlt	GarageCars	0.60
## 5002	GarageFinish	GarageCars	0.01
## 5003	GarageCars	GarageCars	1.00
## 5004	GarageArea	GarageCars	0.88
## 5005	GarageQual	GarageCars	0.56
## 5006	GarageCond	GarageCars	0.56
## 5007	PavedDrive	GarageCars	0.28
## 5008	WoodDeckSF	GarageCars	0.23
## 5009	OpenPorchSF	GarageCars	0.21
## 5010	EnclosedPorch	GarageCars	-0.15
## 5011	X3SsnPorch	GarageCars	0.04
## 5012	ScreenPorch	GarageCars	0.05
## 5013	PoolArea	GarageCars	0.02
## 5014	PoolQC	GarageCars	0.01
## 5015	Fence	GarageCars	-0.19
## 5016	MiscFeature	GarageCars	-0.06
## 5017	MiscVal	GarageCars	-0.04
## 5018	MoSold	GarageCars	0.04
## 5019	YrSold	GarageCars	-0.04
## 5020	SaleType	GarageCars	-0.07
## 5021	SaleCondition	GarageCars	0.18
## 5022	SalePrice	GarageCars	0.64
## 5023	Id	GarageArea	0.02
## 5024	MSSubClass	GarageArea	-0.10
## 5025	MSZoning	GarageArea	-0.19
## 5026	LotFrontage	GarageArea	0.20
## 5027	LotArea	GarageArea	0.18
## 5028	Street	GarageArea	-0.05
## 5029	Alley	GarageArea	-0.06
## 5030	LotShape	GarageArea	-0.16
## 5031	LandContour	GarageArea	0.05

##	5032	Utilities	GarageArea	0.01
##	5033	LotConfig	GarageArea	-0.06
##	5034	LandSlope	GarageArea	0.00
##	5035	Neighborhood	GarageArea	0.18
##	5036	Condition1	GarageArea	0.08
##	5037	Condition2	GarageArea	0.06
##	5038	BldgType	GarageArea	-0.06
##	5039	HouseStyle	GarageArea	0.16
##	5040	OverallQual	GarageArea	0.56
##	5041	OverallCond	GarageArea	-0.15
##	5042	YearBuilt	GarageArea	0.48
##	5043	YearRemodAdd	GarageArea	0.37
##	5044	RoofStyle	GarageArea	0.14
##	5045	RoofMatl	GarageArea	0.05
##	5046	Exterior1st	GarageArea	0.10
##	5047	Exterior2nd	GarageArea	0.10
##	5048	MasVnrType	GarageArea	-0.02
##	5049	MasVnrArea	GarageArea	0.37
##	5050	ExterQual	GarageArea	-0.44
##	5051	ExterCond	GarageArea	0.14
##	5052	Foundation	GarageArea	0.33
##	5053	BsmtQual	GarageArea	-0.33
##	5054	BsmtCond	GarageArea	0.10
##	5055	BsmtExposure	GarageArea	-0.17
##	5056	BsmtFinType1	GarageArea	-0.02
##	5057	BsmtFinSF1	GarageArea	0.30
##	5058	BsmtFinType2	GarageArea	0.06
##	5059	BsmtFinSF2	GarageArea	-0.02
##	5060	BsmtUnfSF	GarageArea	0.18
##	5061	TotalBsmtSF	GarageArea	0.49
##	5062	Heating	GarageArea	-0.09
##	5063	HeatingQC	GarageArea	-0.26
##	5064	CentralAir	GarageArea	0.23
##	5065	Electrical	GarageArea	0.23
##	5066	X1stFlrSF	GarageArea	0.49
##	5067	X2ndFlrSF	GarageArea	0.14
##	5068	LowQualFinSF	GarageArea	-0.07
##	5069	GrLivArea	GarageArea	0.47
##	5070	BsmtFullBath	GarageArea	0.18
##	5071	BsmtHalfBath	GarageArea	-0.02
##	5072	FullBath	GarageArea	0.41
##	5073	HalfBath	GarageArea	0.16
##	5074	BedroomAbvGr	GarageArea	0.07
##	5075	KitchenAbvGr	GarageArea	-0.06
##	5076	KitchenQual	GarageArea	-0.36
##	5077	TotRmsAbvGrd	GarageArea	0.34
##	5078	Functional	GarageArea	0.08
##	5079	Fireplaces	GarageArea	0.27
##	5080	FireplaceQu	GarageArea	0.25
##	5081	GarageType	GarageArea	0.03
##	5082	GarageYrBlt	GarageArea	0.56
##	5083	GarageFinish	GarageArea	0.03
##	5084	GarageCars	GarageArea	0.88
##	5085	GarageArea	GarageArea	1.00

##	5086	GarageQual	GarageArea	0.53
##	5087	GarageCond	GarageArea	0.53
##	5088	PavedDrive	GarageArea	0.28
##	5089	WoodDeckSF	GarageArea	0.22
##	5090	OpenPorchSF	GarageArea	0.24
##	5091	EnclosedPorch	GarageArea	-0.12
##	5092	X3SsnPorch	GarageArea	0.04
##	5093	ScreenPorch	GarageArea	0.05
##	5094	PoolArea	GarageArea	0.06
##	5095	PoolQC	GarageArea	0.07
##	5096	Fence	GarageArea	-0.15
##	5097	MiscFeature	GarageArea	-0.04
##	5098	MiscVal	GarageArea	-0.03
##	5099	MoSold	GarageArea	0.03
##	5100	YrSold	GarageArea	-0.03
##	5101	SaleType	GarageArea	-0.09
##	5102	SaleCondition	GarageArea	0.18
##	5103	SalePrice	GarageArea	0.62
##	5104	Id	GarageQual	0.01
##	5105	MSSubClass	GarageQual	-0.07
##	5106	MSZoning	GarageQual	-0.13
##	5107	LotFrontage	GarageQual	0.01
##	5108	LotArea	GarageQual	0.08
##	5109	Street	GarageQual	0.02
##	5110	Alley	GarageQual	-0.06
##	5111	LotShape	GarageQual	-0.11
##	5112	LandContour	GarageQual	0.07
##	5113	Utilities	GarageQual	0.01
##	5114	LotConfig	GarageQual	-0.02
##	5115	LandSlope	GarageQual	0.00
##	5116	Neighborhood	GarageQual	0.05
##	5117	Condition1	GarageQual	0.10
##	5118	Condition2	GarageQual	0.01
##	5119	BldgType	GarageQual	0.00
##	5120	HouseStyle	GarageQual	0.10
##	5121	OverallQual	GarageQual	0.28
##	5122	OverallCond	GarageQual	-0.04
##	5123	YearBuilt	GarageQual	0.35
##	5124	YearRemodAdd	GarageQual	0.16
##	5125	RoofStyle	GarageQual	0.07
##	5126	RoofMatl	GarageQual	-0.01
##	5127	Exterior1st	GarageQual	0.02
##	5128	Exterior2nd	GarageQual	0.00
##	5129	MasVnrType	GarageQual	-0.09
##	5130	MasVnrArea	GarageQual	0.16
##	5131	ExterQual	GarageQual	-0.13
##	5132	ExterCond	GarageQual	0.11
##	5133	Foundation	GarageQual	0.22
##	5134	BsmtQual	GarageQual	-0.07
##	5135	BsmtCond	GarageQual	0.10
##	5136	BsmtExposure	GarageQual	-0.04
##	5137	BsmtFinType1	GarageQual	-0.09
##	5138	BsmtFinSF1	GarageQual	0.16
##	5139	BsmtFinType2	GarageQual	0.01

## 5140	BsmtFinSF2	GarageQual	0.06
## 5141	BsmtUnfSF	GarageQual	0.00
## 5142	TotalBsmtSF	GarageQual	0.19
## 5143	Heating	GarageQual	-0.12
## 5144	HeatingQC	GarageQual	-0.09
## 5145	CentralAir	GarageQual	0.30
## 5146	Electrical	GarageQual	0.16
## 5147	X1stFlrSF	GarageQual	0.18
## 5148	X2ndFlrSF	GarageQual	0.03
## 5149	LowQualFinSF	GarageQual	-0.15
## 5150	GrLivArea	GarageQual	0.14
## 5151	BsmtFullBath	GarageQual	0.08
## 5152	BsmtHalfBath	GarageQual	0.04
## 5153	FullBath	GarageQual	0.15
## 5154	HalfBath	GarageQual	0.11
## 5155	BedroomAbvGr	GarageQual	0.00
## 5156	KitchenAbvGr	GarageQual	-0.17
## 5157	KitchenQual	GarageQual	-0.05
## 5158	TotRmsAbvGrd	GarageQual	0.08
## 5159	Functional	GarageQual	0.05
## 5160	Fireplaces	GarageQual	0.18
## 5161	FireplaceQu	GarageQual	0.19
## 5162	GarageType	GarageQual	0.26
## 5163	GarageYrBlt	GarageQual	0.89
## 5164	GarageFinish	GarageQual	0.40
## 5165	GarageCars	GarageQual	0.56
## 5166	GarageArea	GarageQual	0.53
## 5167	GarageQual	GarageQual	1.00
## 5168	GarageCond	GarageQual	0.90
## 5169	PavedDrive	GarageQual	0.38
## 5170	WoodDeckSF	GarageQual	0.12
## 5171	OpenPorchSF	GarageQual	0.04
## 5172	EnclosedPorch	GarageQual	-0.11
## 5173	X3SsnPorch	GarageQual	0.02
## 5174	ScreenPorch	GarageQual	0.04
## 5175	PoolArea	GarageQual	0.00
## 5176	PoolQC	GarageQual	0.00
## 5177	Fence	GarageQual	-0.02
## 5178	MiscFeature	GarageQual	-0.02
## 5179	MiscVal	GarageQual	-0.01
## 5180	MoSold	GarageQual	0.02
## 5181	YrSold	GarageQual	0.01
## 5182	SaleType	GarageQual	-0.04
## 5183	SaleCondition	GarageQual	0.14
## 5184	SalePrice	GarageQual	0.26
## 5185	Id	GarageCond	0.01
## 5186	MSSubClass	GarageCond	-0.08
## 5187	MSZoning	GarageCond	-0.09
## 5188	LotFrontage	GarageCond	0.02
## 5189	LotArea	GarageCond	0.08
## 5190	Street	GarageCond	0.02
## 5191	Alley	GarageCond	-0.07
## 5192	LotShape	GarageCond	-0.10
## 5193	LandContour	GarageCond	0.06

##	5194	Utilities	GarageCond	0.01
##	5195	LotConfig	GarageCond	-0.02
##	5196	LandSlope	GarageCond	-0.02
##	5197	Neighborhood	GarageCond	0.07
##	5198	Condition1	GarageCond	0.08
##	5199	Condition2	GarageCond	0.04
##	5200	BldgType	GarageCond	0.00
##	5201	HouseStyle	GarageCond	0.08
##	5202	OverallQual	GarageCond	0.30
##	5203	OverallCond	GarageCond	0.00
##	5204	YearBuilt	GarageCond	0.32
##	5205	YearRemodAdd	GarageCond	0.17
##	5206	RoofStyle	GarageCond	0.05
##	5207	RoofMatl	GarageCond	-0.01
##	5208	Exterior1st	GarageCond	0.03
##	5209	Exterior2nd	GarageCond	0.03
##	5210	MasVnrType	GarageCond	-0.09
##	5211	MasVnrArea	GarageCond	0.14
##	5212	ExterQual	GarageCond	-0.13
##	5213	ExterCond	GarageCond	0.12
##	5214	Foundation	GarageCond	0.17
##	5215	BsmtQual	GarageCond	-0.05
##	5216	BsmtCond	GarageCond	0.15
##	5217	BsmtExposure	GarageCond	-0.02
##	5218	BsmtFinType1	GarageCond	-0.06
##	5219	BsmtFinSF1	GarageCond	0.14
##	5220	BsmtFinType2	GarageCond	0.04
##	5221	BsmtFinSF2	GarageCond	0.04
##	5222	BsmtUnfSF	GarageCond	0.03
##	5223	TotalBsmtSF	GarageCond	0.19
##	5224	Heating	GarageCond	-0.11
##	5225	HeatingQC	GarageCond	-0.10
##	5226	CentralAir	GarageCond	0.32
##	5227	Electrical	GarageCond	0.16
##	5228	X1stFlrSF	GarageCond	0.19
##	5229	X2ndFlrSF	GarageCond	0.05
##	5230	LowQualFinSF	GarageCond	-0.14
##	5231	GrLivArea	GarageCond	0.17
##	5232	BsmtFullBath	GarageCond	0.07
##	5233	BsmtHalfBath	GarageCond	0.03
##	5234	FullBath	GarageCond	0.15
##	5235	HalfBath	GarageCond	0.13
##	5236	BedroomAbvGr	GarageCond	-0.01
##	5237	KitchenAbvGr	GarageCond	-0.16
##	5238	KitchenQual	GarageCond	-0.07
##	5239	TotRmsAbvGrd	GarageCond	0.09
##	5240	Functional	GarageCond	0.04
##	5241	Fireplaces	GarageCond	0.21
##	5242	FireplaceQu	GarageCond	0.21
##	5243	GarageType	GarageCond	0.28
##	5244	GarageYrBlt	GarageCond	0.92
##	5245	GarageFinish	GarageCond	0.44
##	5246	GarageCars	GarageCond	0.56
##	5247	GarageArea	GarageCond	0.53

##	5248	GarageQual	GarageCond	0.90
##	5249	GarageCond	GarageCond	1.00
##	5250	PavedDrive	GarageCond	0.38
##	5251	WoodDeckSF	GarageCond	0.13
##	5252	OpenPorchSF	GarageCond	0.06
##	5253	EnclosedPorch	GarageCond	-0.10
##	5254	X3SsnPorch	GarageCond	0.03
##	5255	ScreenPorch	GarageCond	0.08
##	5256	PoolArea	GarageCond	0.00
##	5257	PoolQC	GarageCond	0.00
##	5258	Fence	GarageCond	-0.02
##	5259	MiscFeature	GarageCond	-0.01
##	5260	MiscVal	GarageCond	0.00
##	5261	MoSold	GarageCond	0.02
##	5262	YrSold	GarageCond	0.00
##	5263	SaleType	GarageCond	-0.03
##	5264	SaleCondition	GarageCond	0.13
##	5265	SalePrice	GarageCond	0.28
##	5266	Id	PavedDrive	0.01
##	5267	MSSubClass	PavedDrive	-0.06
##	5268	MSZoning	PavedDrive	-0.10
##	5269	LotFrontage	PavedDrive	0.02
##	5270	LotArea	PavedDrive	0.02
##	5271	Street	PavedDrive	0.02
##	5272	Alley	PavedDrive	-0.18
##	5273	LotShape	PavedDrive	-0.11
##	5274	LandContour	PavedDrive	0.14
##	5275	Utilities	PavedDrive	0.01
##	5276	LotConfig	PavedDrive	-0.05
##	5277	LandSlope	PavedDrive	-0.02
##	5278	Neighborhood	PavedDrive	0.03
##	5279	Condition1	PavedDrive	0.11
##	5280	Condition2	PavedDrive	-0.01
##	5281	BldgType	PavedDrive	0.06
##	5282	HouseStyle	PavedDrive	0.12
##	5283	OverallQual	PavedDrive	0.23
##	5284	OverallCond	PavedDrive	-0.06
##	5285	YearBuilt	PavedDrive	0.43
##	5286	YearRemodAdd	PavedDrive	0.17
##	5287	RoofStyle	PavedDrive	0.00
##	5288	RoofMatl	PavedDrive	0.04
##	5289	Exterior1st	PavedDrive	-0.06
##	5290	Exterior2nd	PavedDrive	-0.04
##	5291	MasVnrType	PavedDrive	-0.09
##	5292	MasVnrArea	PavedDrive	0.14
##	5293	ExterQual	PavedDrive	-0.11
##	5294	ExterCond	PavedDrive	0.14
##	5295	Foundation	PavedDrive	0.19
##	5296	BsmtQual	PavedDrive	-0.04
##	5297	BsmtCond	PavedDrive	0.19
##	5298	BsmtExposure	PavedDrive	-0.02
##	5299	BsmtFinType1	PavedDrive	-0.16
##	5300	BsmtFinSF1	PavedDrive	0.19
##	5301	BsmtFinType2	PavedDrive	0.05

## 5302	BsmtFinSF2	PavedDrive	0.06
## 5303	BsmtUnfSF	PavedDrive	-0.01
## 5304	TotalBsmtSF	PavedDrive	0.21
## 5305	Heating	PavedDrive	-0.14
## 5306	HeatingQC	PavedDrive	-0.10
## 5307	CentralAir	PavedDrive	0.34
## 5308	Electrical	PavedDrive	0.21
## 5309	X1stFlrSF	PavedDrive	0.16
## 5310	X2ndFlrSF	PavedDrive	-0.04
## 5311	LowQualFinSF	PavedDrive	-0.07
## 5312	GrLivArea	PavedDrive	0.08
## 5313	BsmtFullBath	PavedDrive	0.12
## 5314	BsmtHalfBath	PavedDrive	0.04
## 5315	FullBath	PavedDrive	0.13
## 5316	HalfBath	PavedDrive	0.11
## 5317	BedroomAbvGr	PavedDrive	-0.03
## 5318	KitchenAbvGr	PavedDrive	-0.17
## 5319	KitchenQual	PavedDrive	-0.05
## 5320	TotRmsAbvGrd	PavedDrive	0.00
## 5321	Functional	PavedDrive	0.05
## 5322	Fireplaces	PavedDrive	0.14
## 5323	FireplaceQu	PavedDrive	0.15
## 5324	GarageType	PavedDrive	-0.08
## 5325	GarageYrBltd	PavedDrive	0.34
## 5326	GarageFinish	PavedDrive	0.04
## 5327	GarageCars	PavedDrive	0.28
## 5328	GarageArea	PavedDrive	0.28
## 5329	GarageQual	PavedDrive	0.38
## 5330	GarageCond	PavedDrive	0.38
## 5331	PavedDrive	PavedDrive	1.00
## 5332	WoodDeckSF	PavedDrive	0.11
## 5333	OpenPorchSF	PavedDrive	0.03
## 5334	EnclosedPorch	PavedDrive	-0.20
## 5335	X3SsnPorch	PavedDrive	0.02
## 5336	ScreenPorch	PavedDrive	0.05
## 5337	PoolArea	PavedDrive	0.02
## 5338	PoolQC	PavedDrive	0.02
## 5339	Fence	PavedDrive	-0.03
## 5340	MiscFeature	PavedDrive	0.00
## 5341	MiscVal	PavedDrive	-0.04
## 5342	MoSold	PavedDrive	0.02
## 5343	YrSold	PavedDrive	0.01
## 5344	SaleType	PavedDrive	-0.03
## 5345	SaleCondition	PavedDrive	0.07
## 5346	SalePrice	PavedDrive	0.23
## 5347	Id	WoodDeckSF	-0.03
## 5348	MSSubClass	WoodDeckSF	-0.01
## 5349	MSZoning	WoodDeckSF	-0.01
## 5350	LotFrontage	WoodDeckSF	-0.02
## 5351	LotArea	WoodDeckSF	0.17
## 5352	Street	WoodDeckSF	-0.02
## 5353	Alley	WoodDeckSF	-0.12
## 5354	LotShape	WoodDeckSF	-0.17
## 5355	LandContour	WoodDeckSF	0.00

##	5356	Utilities	WoodDeckSF	-0.02
##	5357	LotConfig	WoodDeckSF	-0.04
##	5358	LandSlope	WoodDeckSF	0.10
##	5359	Neighborhood	WoodDeckSF	0.05
##	5360	Condition1	WoodDeckSF	0.05
##	5361	Condition2	WoodDeckSF	0.01
##	5362	BldgType	WoodDeckSF	-0.01
##	5363	HouseStyle	WoodDeckSF	0.09
##	5364	OverallQual	WoodDeckSF	0.24
##	5365	OverallCond	WoodDeckSF	0.00
##	5366	YearBuilt	WoodDeckSF	0.22
##	5367	YearRemodAdd	WoodDeckSF	0.21
##	5368	RoofStyle	WoodDeckSF	0.08
##	5369	RoofMatl	WoodDeckSF	0.12
##	5370	Exterior1st	WoodDeckSF	0.05
##	5371	Exterior2nd	WoodDeckSF	0.03
##	5372	MasVnrType	WoodDeckSF	-0.03
##	5373	MasVnrArea	WoodDeckSF	0.16
##	5374	ExterQual	WoodDeckSF	-0.18
##	5375	ExterCond	WoodDeckSF	0.02
##	5376	Foundation	WoodDeckSF	0.14
##	5377	BsmtQual	WoodDeckSF	-0.14
##	5378	BsmtCond	WoodDeckSF	0.07
##	5379	BsmtExposure	WoodDeckSF	-0.15
##	5380	BsmtFinType1	WoodDeckSF	-0.07
##	5381	BsmtFinSF1	WoodDeckSF	0.20
##	5382	BsmtFinType2	WoodDeckSF	0.02
##	5383	BsmtFinSF2	WoodDeckSF	0.07
##	5384	BsmtUnfSF	WoodDeckSF	-0.01
##	5385	TotalBsmtSF	WoodDeckSF	0.23
##	5386	Heating	WoodDeckSF	-0.08
##	5387	HeatingQC	WoodDeckSF	-0.11
##	5388	CentralAir	WoodDeckSF	0.15
##	5389	Electrical	WoodDeckSF	0.15
##	5390	X1stFlrSF	WoodDeckSF	0.24
##	5391	X2ndFlrSF	WoodDeckSF	0.09
##	5392	LowQualFinSF	WoodDeckSF	-0.03
##	5393	GrLivArea	WoodDeckSF	0.25
##	5394	BsmtFullBath	WoodDeckSF	0.18
##	5395	BsmtHalfBath	WoodDeckSF	0.04
##	5396	FullBath	WoodDeckSF	0.19
##	5397	HalfBath	WoodDeckSF	0.11
##	5398	BedroomAbvGr	WoodDeckSF	0.05
##	5399	KitchenAbvGr	WoodDeckSF	-0.09
##	5400	KitchenQual	WoodDeckSF	-0.16
##	5401	TotRmsAbvGrd	WoodDeckSF	0.17
##	5402	Functional	WoodDeckSF	-0.01
##	5403	Fireplaces	WoodDeckSF	0.20
##	5404	FireplaceQu	WoodDeckSF	0.19
##	5405	GarageType	WoodDeckSF	-0.15
##	5406	GarageYrBlt	WoodDeckSF	0.12
##	5407	GarageFinish	WoodDeckSF	-0.14
##	5408	GarageCars	WoodDeckSF	0.23
##	5409	GarageArea	WoodDeckSF	0.22

## 5410	GarageQual	WoodDeckSF	0.12
## 5411	GarageCond	WoodDeckSF	0.13
## 5412	PavedDrive	WoodDeckSF	0.11
## 5413	WoodDeckSF	WoodDeckSF	1.00
## 5414	OpenPorchSF	WoodDeckSF	0.06
## 5415	EnclosedPorch	WoodDeckSF	-0.13
## 5416	X3SsnPorch	WoodDeckSF	-0.03
## 5417	ScreenPorch	WoodDeckSF	-0.07
## 5418	PoolArea	WoodDeckSF	0.07
## 5419	PoolQC	WoodDeckSF	0.08
## 5420	Fence	WoodDeckSF	0.02
## 5421	MiscFeature	WoodDeckSF	0.03
## 5422	MiscVal	WoodDeckSF	-0.01
## 5423	MoSold	WoodDeckSF	0.02
## 5424	YrSold	WoodDeckSF	0.02
## 5425	SaleType	WoodDeckSF	0.06
## 5426	SaleCondition	WoodDeckSF	0.06
## 5427	SalePrice	WoodDeckSF	0.32
## 5428	Id	OpenPorchSF	0.00
## 5429	MSSubClass	OpenPorchSF	-0.01
## 5430	MSZoning	OpenPorchSF	-0.15
## 5431	LotFrontage	OpenPorchSF	0.07
## 5432	LotArea	OpenPorchSF	0.08
## 5433	Street	OpenPorchSF	-0.01
## 5434	Alley	OpenPorchSF	0.07
## 5435	LotShape	OpenPorchSF	-0.08
## 5436	LandContour	OpenPorchSF	0.04
## 5437	Utilities	OpenPorchSF	0.03
## 5438	LotConfig	OpenPorchSF	-0.05
## 5439	LandSlope	OpenPorchSF	-0.03
## 5440	Neighborhood	OpenPorchSF	0.14
## 5441	Condition1	OpenPorchSF	0.09
## 5442	Condition2	OpenPorchSF	0.03
## 5443	BldgType	OpenPorchSF	-0.04
## 5444	HouseStyle	OpenPorchSF	0.14
## 5445	OverallQual	OpenPorchSF	0.31
## 5446	OverallCond	OpenPorchSF	-0.03
## 5447	YearBuilt	OpenPorchSF	0.19
## 5448	YearRemodAdd	OpenPorchSF	0.23
## 5449	RoofStyle	OpenPorchSF	0.01
## 5450	RoofMatl	OpenPorchSF	0.05
## 5451	Exterior1st	OpenPorchSF	0.08
## 5452	Exterior2nd	OpenPorchSF	0.08
## 5453	MasVnrType	OpenPorchSF	0.01
## 5454	MasVnrArea	OpenPorchSF	0.12
## 5455	ExterQual	OpenPorchSF	-0.27
## 5456	ExterCond	OpenPorchSF	-0.01
## 5457	Foundation	OpenPorchSF	0.16
## 5458	BsmtQual	OpenPorchSF	-0.16
## 5459	BsmtCond	OpenPorchSF	0.06
## 5460	BsmtExposure	OpenPorchSF	-0.01
## 5461	BsmtFinType1	OpenPorchSF	0.03
## 5462	BsmtFinSF1	OpenPorchSF	0.11
## 5463	BsmtFinType2	OpenPorchSF	0.08

##	5464	BsmtFinSF2	OpenPorchSF	0.00
##	5465	BsmtUnfSF	OpenPorchSF	0.13
##	5466	TotalBsmtSF	OpenPorchSF	0.25
##	5467	Heating	OpenPorchSF	-0.03
##	5468	HeatingQC	OpenPorchSF	-0.17
##	5469	CentralAir	OpenPorchSF	0.03
##	5470	Electrical	OpenPorchSF	0.09
##	5471	X1stFlrSF	OpenPorchSF	0.21
##	5472	X2ndFlrSF	OpenPorchSF	0.21
##	5473	LowQualFinSF	OpenPorchSF	0.02
##	5474	GrLivArea	OpenPorchSF	0.33
##	5475	BsmtFullBath	OpenPorchSF	0.07
##	5476	BsmtHalfBath	OpenPorchSF	-0.03
##	5477	FullBath	OpenPorchSF	0.26
##	5478	HalfBath	OpenPorchSF	0.20
##	5479	BedroomAbvGr	OpenPorchSF	0.09
##	5480	KitchenAbvGr	OpenPorchSF	-0.07
##	5481	KitchenQual	OpenPorchSF	-0.22
##	5482	TotRmsAbvGrd	OpenPorchSF	0.23
##	5483	Functional	OpenPorchSF	0.07
##	5484	Fireplaces	OpenPorchSF	0.17
##	5485	FireplaceQu	OpenPorchSF	0.17
##	5486	GarageType	OpenPorchSF	-0.10
##	5487	GarageYrBltd	OpenPorchSF	0.05
##	5488	GarageFinish	OpenPorchSF	-0.16
##	5489	GarageCars	OpenPorchSF	0.21
##	5490	GarageArea	OpenPorchSF	0.24
##	5491	GarageQual	OpenPorchSF	0.04
##	5492	GarageCond	OpenPorchSF	0.06
##	5493	PavedDrive	OpenPorchSF	0.03
##	5494	WoodDeckSF	OpenPorchSF	0.06
##	5495	OpenPorchSF	OpenPorchSF	1.00
##	5496	EnclosedPorch	OpenPorchSF	-0.09
##	5497	X3SsnPorch	OpenPorchSF	-0.01
##	5498	ScreenPorch	OpenPorchSF	0.07
##	5499	PoolArea	OpenPorchSF	0.06
##	5500	PoolQC	OpenPorchSF	0.08
##	5501	Fence	OpenPorchSF	-0.07
##	5502	MiscFeature	OpenPorchSF	0.00
##	5503	MiscVal	OpenPorchSF	-0.02
##	5504	MoSold	OpenPorchSF	0.07
##	5505	YrSold	OpenPorchSF	-0.06
##	5506	SaleType	OpenPorchSF	-0.01
##	5507	SaleCondition	OpenPorchSF	0.06
##	5508	SalePrice	OpenPorchSF	0.32
##	5509	Id	EnclosedPorch	0.00
##	5510	MSSubClass	EnclosedPorch	-0.01
##	5511	MSZoning	EnclosedPorch	0.12
##	5512	LotFrontage	EnclosedPorch	0.03
##	5513	LotArea	EnclosedPorch	-0.02
##	5514	Street	EnclosedPorch	0.02
##	5515	Alley	EnclosedPorch	0.15
##	5516	LotShape	EnclosedPorch	0.08
##	5517	LandContour	EnclosedPorch	-0.06

## 5518	Utilities	EnclosedPorch	-0.01
## 5519	LotConfig	EnclosedPorch	-0.07
## 5520	LandSlope	EnclosedPorch	-0.01
## 5521	Neighborhood	EnclosedPorch	0.04
## 5522	Condition1	EnclosedPorch	-0.08
## 5523	Condition2	EnclosedPorch	0.01
## 5524	BldgType	EnclosedPorch	-0.11
## 5525	HouseStyle	EnclosedPorch	-0.07
## 5526	OverallQual	EnclosedPorch	-0.11
## 5527	OverallCond	EnclosedPorch	0.07
## 5528	YearBuilt	EnclosedPorch	-0.39
## 5529	YearRemodAdd	EnclosedPorch	-0.19
## 5530	RoofStyle	EnclosedPorch	-0.01
## 5531	RoofMatl	EnclosedPorch	-0.03
## 5532	Exterior1st	EnclosedPorch	-0.02
## 5533	Exterior2nd	EnclosedPorch	-0.02
## 5534	MasVnrType	EnclosedPorch	0.04
## 5535	MasVnrArea	EnclosedPorch	-0.11
## 5536	ExterQual	EnclosedPorch	0.12
## 5537	ExterCond	EnclosedPorch	-0.07
## 5538	Foundation	EnclosedPorch	-0.21
## 5539	BsmtQual	EnclosedPorch	0.13
## 5540	BsmtCond	EnclosedPorch	-0.04
## 5541	BsmtExposure	EnclosedPorch	0.10
## 5542	BsmtFinType1	EnclosedPorch	0.09
## 5543	BsmtFinSF1	EnclosedPorch	-0.10
## 5544	BsmtFinType2	EnclosedPorch	-0.03
## 5545	BsmtFinSF2	EnclosedPorch	0.04
## 5546	BsmtUnfSF	EnclosedPorch	0.00
## 5547	TotalBsmtSF	EnclosedPorch	-0.10
## 5548	Heating	EnclosedPorch	0.07
## 5549	HeatingQC	EnclosedPorch	0.09
## 5550	CentralAir	EnclosedPorch	-0.16
## 5551	Electrical	EnclosedPorch	-0.14
## 5552	X1stFlrSF	EnclosedPorch	-0.07
## 5553	X2ndFlrSF	EnclosedPorch	0.06
## 5554	LowQualFinSF	EnclosedPorch	0.06
## 5555	GrLivArea	EnclosedPorch	0.01
## 5556	BsmtFullBath	EnclosedPorch	-0.05
## 5557	BsmtHalfBath	EnclosedPorch	-0.01
## 5558	FullBath	EnclosedPorch	-0.12
## 5559	HalfBath	EnclosedPorch	-0.10
## 5560	BedroomAbvGr	EnclosedPorch	0.04
## 5561	KitchenAbvGr	EnclosedPorch	0.04
## 5562	KitchenQual	EnclosedPorch	0.07
## 5563	TotRmsAbvGrd	EnclosedPorch	0.00
## 5564	Functional	EnclosedPorch	-0.04
## 5565	Fireplaces	EnclosedPorch	-0.02
## 5566	FireplaceQu	EnclosedPorch	-0.04
## 5567	GarageType	EnclosedPorch	0.14
## 5568	GarageYrBlt	EnclosedPorch	-0.08
## 5569	GarageFinish	EnclosedPorch	0.12
## 5570	GarageCars	EnclosedPorch	-0.15
## 5571	GarageArea	EnclosedPorch	-0.12

## 5572	GarageQual	EnclosedPorch	-0.11
## 5573	GarageCond	EnclosedPorch	-0.10
## 5574	PavedDrive	EnclosedPorch	-0.20
## 5575	WoodDeckSF	EnclosedPorch	-0.13
## 5576	OpenPorchSF	EnclosedPorch	-0.09
## 5577	EnclosedPorch	EnclosedPorch	1.00
## 5578	X3SsnPorch	EnclosedPorch	-0.04
## 5579	ScreenPorch	EnclosedPorch	-0.08
## 5580	PoolArea	EnclosedPorch	0.05
## 5581	PoolQC	EnclosedPorch	0.02
## 5582	Fence	EnclosedPorch	0.06
## 5583	MiscFeature	EnclosedPorch	0.03
## 5584	MiscVal	EnclosedPorch	0.02
## 5585	MoSold	EnclosedPorch	-0.03
## 5586	YrSold	EnclosedPorch	-0.01
## 5587	SaleType	EnclosedPorch	-0.02
## 5588	SaleCondition	EnclosedPorch	-0.10
## 5589	SalePrice	EnclosedPorch	-0.13
## 5590	Id	X3SsnPorch	-0.05
## 5591	MSSubClass	X3SsnPorch	-0.04
## 5592	MSZoning	X3SsnPorch	0.00
## 5593	LotFrontage	X3SsnPorch	0.02
## 5594	LotArea	X3SsnPorch	0.02
## 5595	Street	X3SsnPorch	0.01
## 5596	Alley	X3SsnPorch	-0.03
## 5597	LotShape	X3SsnPorch	-0.04
## 5598	LandContour	X3SsnPorch	-0.02
## 5599	Utilities	X3SsnPorch	0.00
## 5600	LotConfig	X3SsnPorch	-0.03
## 5601	LandSlope	X3SsnPorch	0.01
## 5602	Neighborhood	X3SsnPorch	-0.02
## 5603	Condition1	X3SsnPorch	0.07
## 5604	Condition2	X3SsnPorch	0.00
## 5605	BldgType	X3SsnPorch	-0.02
## 5606	HouseStyle	X3SsnPorch	-0.03
## 5607	OverallQual	X3SsnPorch	0.03
## 5608	OverallCond	X3SsnPorch	0.03
## 5609	YearBuilt	X3SsnPorch	0.03
## 5610	YearRemodAdd	X3SsnPorch	0.05
## 5611	RoofStyle	X3SsnPorch	0.02
## 5612	RoofMatl	X3SsnPorch	0.00
## 5613	Exterior1st	X3SsnPorch	-0.04
## 5614	Exterior2nd	X3SsnPorch	-0.02
## 5615	MasVnrType	X3SsnPorch	-0.03
## 5616	MasVnrArea	X3SsnPorch	0.02
## 5617	ExterQual	X3SsnPorch	-0.04
## 5618	ExterCond	X3SsnPorch	0.01
## 5619	Foundation	X3SsnPorch	0.05
## 5620	BsmtQual	X3SsnPorch	-0.02
## 5621	BsmtCond	X3SsnPorch	0.02
## 5622	BsmtExposure	X3SsnPorch	0.01
## 5623	BsmtFinType1	X3SsnPorch	-0.05
## 5624	BsmtFinSF1	X3SsnPorch	0.03
## 5625	BsmtFinType2	X3SsnPorch	0.00

## 5626	BsmtFinSF2	X3SsnPorch	-0.03
## 5627	BsmtUnfSF	X3SsnPorch	0.02
## 5628	TotalBsmtSF	X3SsnPorch	0.04
## 5629	Heating	X3SsnPorch	-0.01
## 5630	HeatingQC	X3SsnPorch	-0.05
## 5631	CentralAir	X3SsnPorch	0.03
## 5632	Electrical	X3SsnPorch	0.01
## 5633	X1stFlrSF	X3SsnPorch	0.06
## 5634	X2ndFlrSF	X3SsnPorch	-0.02
## 5635	LowQualFinSF	X3SsnPorch	0.00
## 5636	GrLivArea	X3SsnPorch	0.02
## 5637	BsmtFullBath	X3SsnPorch	0.00
## 5638	BsmtHalfBath	X3SsnPorch	0.04
## 5639	FullBath	X3SsnPorch	0.04
## 5640	HalfBath	X3SsnPorch	0.00
## 5641	BedroomAbvGr	X3SsnPorch	-0.02
## 5642	KitchenAbvGr	X3SsnPorch	-0.02
## 5643	KitchenQual	X3SsnPorch	-0.01
## 5644	TotRmsAbvGrd	X3SsnPorch	-0.01
## 5645	Functional	X3SsnPorch	0.02
## 5646	Fireplaces	X3SsnPorch	0.01
## 5647	FireplaceQu	X3SsnPorch	0.02
## 5648	GarageType	X3SsnPorch	-0.04
## 5649	GarageYrBlt	X3SsnPorch	0.03
## 5650	GarageFinish	X3SsnPorch	-0.01
## 5651	GarageCars	X3SsnPorch	0.04
## 5652	GarageArea	X3SsnPorch	0.04
## 5653	GarageQual	X3SsnPorch	0.02
## 5654	GarageCond	X3SsnPorch	0.03
## 5655	PavedDrive	X3SsnPorch	0.02
## 5656	WoodDeckSF	X3SsnPorch	-0.03
## 5657	OpenPorchSF	X3SsnPorch	-0.01
## 5658	EnclosedPorch	X3SsnPorch	-0.04
## 5659	X3SsnPorch	X3SsnPorch	1.00
## 5660	ScreenPorch	X3SsnPorch	-0.03
## 5661	PoolArea	X3SsnPorch	-0.01
## 5662	PoolQC	X3SsnPorch	-0.01
## 5663	Fence	X3SsnPorch	0.02
## 5664	MiscFeature	X3SsnPorch	0.02
## 5665	MiscVal	X3SsnPorch	0.00
## 5666	MoSold	X3SsnPorch	0.03
## 5667	YrSold	X3SsnPorch	0.02
## 5668	SaleType	X3SsnPorch	-0.01
## 5669	SaleCondition	X3SsnPorch	0.00
## 5670	SalePrice	X3SsnPorch	0.04
## 5671	Id	ScreenPorch	0.00
## 5672	MSSubClass	ScreenPorch	-0.03
## 5673	MSZoning	ScreenPorch	0.02
## 5674	LotFrontage	ScreenPorch	0.02
## 5675	LotArea	ScreenPorch	0.04
## 5676	Street	ScreenPorch	-0.03
## 5677	Alley	ScreenPorch	-0.02
## 5678	LotShape	ScreenPorch	-0.05
## 5679	LandContour	ScreenPorch	0.00

## 5680	Utilities	ScreenPorch	0.10
## 5681	LotConfig	ScreenPorch	0.00
## 5682	LandSlope	ScreenPorch	0.05
## 5683	Neighborhood	ScreenPorch	0.02
## 5684	Condition1	ScreenPorch	0.01
## 5685	Condition2	ScreenPorch	-0.01
## 5686	BldgType	ScreenPorch	-0.03
## 5687	HouseStyle	ScreenPorch	-0.03
## 5688	OverallQual	ScreenPorch	0.06
## 5689	OverallCond	ScreenPorch	0.05
## 5690	YearBuilt	ScreenPorch	-0.05
## 5691	YearRemodAdd	ScreenPorch	-0.04
## 5692	RoofStyle	ScreenPorch	0.07
## 5693	RoofMatl	ScreenPorch	0.10
## 5694	Exterior1st	ScreenPorch	-0.05
## 5695	Exterior2nd	ScreenPorch	-0.02
## 5696	MasVnrType	ScreenPorch	-0.02
## 5697	MasVnrArea	ScreenPorch	0.06
## 5698	ExterQual	ScreenPorch	-0.01
## 5699	ExterCond	ScreenPorch	-0.02
## 5700	Foundation	ScreenPorch	-0.07
## 5701	BsmtQual	ScreenPorch	0.02
## 5702	BsmtCond	ScreenPorch	0.04
## 5703	BsmtExposure	ScreenPorch	0.02
## 5704	BsmtFinType1	ScreenPorch	-0.01
## 5705	BsmtFinSF1	ScreenPorch	0.06
## 5706	BsmtFinType2	ScreenPorch	0.01
## 5707	BsmtFinSF2	ScreenPorch	0.09
## 5708	BsmtUnfSF	ScreenPorch	-0.01
## 5709	TotalBsmtSF	ScreenPorch	0.08
## 5710	Heating	ScreenPorch	0.00
## 5711	HeatingQC	ScreenPorch	0.06
## 5712	CentralAir	ScreenPorch	0.05
## 5713	Electrical	ScreenPorch	0.01
## 5714	X1stFlrSF	ScreenPorch	0.09
## 5715	X2ndFlrSF	ScreenPorch	0.04
## 5716	LowQualFinSF	ScreenPorch	0.03
## 5717	GrLivArea	ScreenPorch	0.10
## 5718	BsmtFullBath	ScreenPorch	0.02
## 5719	BsmtHalfBath	ScreenPorch	0.03
## 5720	FullBath	ScreenPorch	-0.01
## 5721	HalfBath	ScreenPorch	0.07
## 5722	BedroomAbvGr	ScreenPorch	0.04
## 5723	KitchenAbvGr	ScreenPorch	-0.05
## 5724	KitchenQual	ScreenPorch	-0.03
## 5725	TotRmsAbvGrd	ScreenPorch	0.06
## 5726	Functional	ScreenPorch	-0.01
## 5727	Fireplaces	ScreenPorch	0.18
## 5728	FireplaceQu	ScreenPorch	0.14
## 5729	GarageType	ScreenPorch	-0.01
## 5730	GarageYrBlt	ScreenPorch	0.06
## 5731	GarageFinish	ScreenPorch	0.02
## 5732	GarageCars	ScreenPorch	0.05
## 5733	GarageArea	ScreenPorch	0.05

## 5734	GarageQual	ScreenPorch	0.04
## 5735	GarageCond	ScreenPorch	0.08
## 5736	PavedDrive	ScreenPorch	0.05
## 5737	WoodDeckSF	ScreenPorch	-0.07
## 5738	OpenPorchSF	ScreenPorch	0.07
## 5739	EnclosedPorch	ScreenPorch	-0.08
## 5740	X3SsnPorch	ScreenPorch	-0.03
## 5741	ScreenPorch	ScreenPorch	1.00
## 5742	PoolArea	ScreenPorch	0.05
## 5743	PoolQC	ScreenPorch	0.05
## 5744	Fence	ScreenPorch	0.01
## 5745	MiscFeature	ScreenPorch	0.06
## 5746	MiscVal	ScreenPorch	0.03
## 5747	MoSold	ScreenPorch	0.02
## 5748	YrSold	ScreenPorch	0.01
## 5749	SaleType	ScreenPorch	0.01
## 5750	SaleCondition	ScreenPorch	-0.02
## 5751	SalePrice	ScreenPorch	0.11
## 5752	Id	PoolArea	0.06
## 5753	MSSubClass	PoolArea	0.01
## 5754	MSZoning	PoolArea	0.00
## 5755	LotFrontage	PoolArea	0.11
## 5756	LotArea	PoolArea	0.08
## 5757	Street	PoolArea	0.00
## 5758	Alley	PoolArea	-0.02
## 5759	LotShape	PoolArea	-0.02
## 5760	LandContour	PoolArea	-0.01
## 5761	Utilities	PoolArea	0.00
## 5762	LotConfig	PoolArea	-0.05
## 5763	LandSlope	PoolArea	-0.02
## 5764	Neighborhood	PoolArea	-0.01
## 5765	Condition1	PoolArea	0.01
## 5766	Condition2	PoolArea	0.00
## 5767	BldgType	PoolArea	-0.03
## 5768	HouseStyle	PoolArea	0.08
## 5769	OverallQual	PoolArea	0.07
## 5770	OverallCond	PoolArea	0.00
## 5771	YearBuilt	PoolArea	0.00
## 5772	YearRemodAdd	PoolArea	0.01
## 5773	RoofStyle	PoolArea	0.02
## 5774	RoofMatl	PoolArea	0.06
## 5775	Exterior1st	PoolArea	0.00
## 5776	Exterior2nd	PoolArea	-0.02
## 5777	MasVnrType	PoolArea	0.01
## 5778	MasVnrArea	PoolArea	0.01
## 5779	ExterQual	PoolArea	-0.03
## 5780	ExterCond	PoolArea	-0.03
## 5781	Foundation	PoolArea	0.00
## 5782	BsmtQual	PoolArea	-0.02
## 5783	BsmtCond	PoolArea	0.02
## 5784	BsmtExposure	PoolArea	-0.04
## 5785	BsmtFinType1	PoolArea	-0.03
## 5786	BsmtFinSF1	PoolArea	0.14
## 5787	BsmtFinType2	PoolArea	-0.02

## 5788	BsmtFinSF2	PoolArea	0.04
## 5789	BsmtUnfSF	PoolArea	-0.04
## 5790	TotalBsmtSF	PoolArea	0.13
## 5791	Heating	PoolArea	-0.01
## 5792	HeatingQC	PoolArea	0.03
## 5793	CentralAir	PoolArea	0.02
## 5794	Electrical	PoolArea	0.02
## 5795	X1stFlrSF	PoolArea	0.13
## 5796	X2ndFlrSF	PoolArea	0.08
## 5797	LowQualFinSF	PoolArea	0.06
## 5798	GrLivArea	PoolArea	0.17
## 5799	BsmtFullBath	PoolArea	0.07
## 5800	BsmtHalfBath	PoolArea	0.02
## 5801	FullBath	PoolArea	0.05
## 5802	HalfBath	PoolArea	0.02
## 5803	BedroomAbvGr	PoolArea	0.07
## 5804	KitchenAbvGr	PoolArea	-0.01
## 5805	KitchenQual	PoolArea	-0.06
## 5806	TotRmsAbvGrd	PoolArea	0.08
## 5807	Functional	PoolArea	0.02
## 5808	Fireplaces	PoolArea	0.10
## 5809	FireplaceQu	PoolArea	0.04
## 5810	GarageType	PoolArea	-0.02
## 5811	GarageYrBlt	PoolArea	0.02
## 5812	GarageFinish	PoolArea	-0.01
## 5813	GarageCars	PoolArea	0.02
## 5814	GarageArea	PoolArea	0.06
## 5815	GarageQual	PoolArea	0.00
## 5816	GarageCond	PoolArea	0.00
## 5817	PavedDrive	PoolArea	0.02
## 5818	WoodDeckSF	PoolArea	0.07
## 5819	OpenPorchSF	PoolArea	0.06
## 5820	EnclosedPorch	PoolArea	0.05
## 5821	X3SsnPorch	PoolArea	-0.01
## 5822	ScreenPorch	PoolArea	0.05
## 5823	PoolArea	PoolArea	1.00
## 5824	PoolQC	PoolArea	0.94
## 5825	Fence	PoolArea	0.06
## 5826	MiscFeature	PoolArea	0.05
## 5827	MiscVal	PoolArea	0.03
## 5828	MoSold	PoolArea	-0.03
## 5829	YrSold	PoolArea	-0.06
## 5830	SaleType	PoolArea	0.01
## 5831	SaleCondition	PoolArea	-0.07
## 5832	SalePrice	PoolArea	0.09
## 5833	Id	PoolQC	0.07
## 5834	MSSubClass	PoolQC	0.01
## 5835	MSZoning	PoolQC	0.00
## 5836	LotFrontage	PoolQC	0.12
## 5837	LotArea	PoolQC	0.09
## 5838	Street	PoolQC	0.00
## 5839	Alley	PoolQC	-0.02
## 5840	LotShape	PoolQC	-0.02
## 5841	LandContour	PoolQC	-0.03

## 5842	Utilities	PoolQC	0.00
## 5843	LotConfig	PoolQC	-0.04
## 5844	LandSlope	PoolQC	-0.01
## 5845	Neighborhood	PoolQC	-0.01
## 5846	Condition1	PoolQC	0.01
## 5847	Condition2	PoolQC	0.00
## 5848	BldgType	PoolQC	-0.03
## 5849	HouseStyle	PoolQC	0.08
## 5850	OverallQual	PoolQC	0.06
## 5851	OverallCond	PoolQC	0.01
## 5852	YearBuilt	PoolQC	0.01
## 5853	YearRemodAdd	PoolQC	0.00
## 5854	RoofStyle	PoolQC	0.01
## 5855	RoofMatl	PoolQC	0.06
## 5856	Exterior1st	PoolQC	0.00
## 5857	Exterior2nd	PoolQC	-0.01
## 5858	MasVnrType	PoolQC	0.02
## 5859	MasVnrArea	PoolQC	0.03
## 5860	ExterQual	PoolQC	-0.04
## 5861	ExterCond	PoolQC	-0.02
## 5862	Foundation	PoolQC	-0.01
## 5863	BsmtQual	PoolQC	-0.02
## 5864	BsmtCond	PoolQC	0.02
## 5865	BsmtExposure	PoolQC	-0.05
## 5866	BsmtFinType1	PoolQC	-0.03
## 5867	BsmtFinSF1	PoolQC	0.17
## 5868	BsmtFinType2	PoolQC	-0.01
## 5869	BsmtFinSF2	PoolQC	0.03
## 5870	BsmtUnfSF	PoolQC	-0.03
## 5871	TotalBsmtSF	PoolQC	0.16
## 5872	Heating	PoolQC	-0.01
## 5873	HeatingQC	PoolQC	0.03
## 5874	CentralAir	PoolQC	0.02
## 5875	Electrical	PoolQC	0.02
## 5876	X1stFlrSF	PoolQC	0.15
## 5877	X2ndFlrSF	PoolQC	0.06
## 5878	LowQualFinSF	PoolQC	0.03
## 5879	GrLivArea	PoolQC	0.16
## 5880	BsmtFullBath	PoolQC	0.07
## 5881	BsmtHalfBath	PoolQC	0.00
## 5882	FullBath	PoolQC	0.04
## 5883	HalfBath	PoolQC	0.02
## 5884	BedroomAbvGr	PoolQC	0.06
## 5885	KitchenAbvGr	PoolQC	-0.01
## 5886	KitchenQual	PoolQC	-0.05
## 5887	TotRmsAbvGrd	PoolQC	0.09
## 5888	Functional	PoolQC	0.02
## 5889	Fireplaces	PoolQC	0.10
## 5890	FireplaceQu	PoolQC	0.04
## 5891	GarageType	PoolQC	-0.03
## 5892	GarageYrBlt	PoolQC	0.02
## 5893	GarageFinish	PoolQC	-0.02
## 5894	GarageCars	PoolQC	0.01
## 5895	GarageArea	PoolQC	0.07

## 5896	GarageQual	PoolQC	0.00
## 5897	GarageCond	PoolQC	0.00
## 5898	PavedDrive	PoolQC	0.02
## 5899	WoodDeckSF	PoolQC	0.08
## 5900	OpenPorchSF	PoolQC	0.08
## 5901	EnclosedPorch	PoolQC	0.02
## 5902	X3SsnPorch	PoolQC	-0.01
## 5903	ScreenPorch	PoolQC	0.05
## 5904	PoolArea	PoolQC	0.94
## 5905	PoolQC	PoolQC	1.00
## 5906	Fence	PoolQC	0.05
## 5907	MiscFeature	PoolQC	0.05
## 5908	MiscVal	PoolQC	0.03
## 5909	MoSold	PoolQC	-0.03
## 5910	YrSold	PoolQC	-0.05
## 5911	SaleType	PoolQC	0.00
## 5912	SaleCondition	PoolQC	-0.03
## 5913	SalePrice	PoolQC	0.05
## 5914	Id	Fence	-0.01
## 5915	MSSubClass	Fence	-0.11
## 5916	MSZoning	Fence	0.07
## 5917	LotFrontage	Fence	0.01
## 5918	LotArea	Fence	-0.05
## 5919	Street	Fence	0.03
## 5920	Alley	Fence	-0.02
## 5921	LotShape	Fence	0.05
## 5922	LandContour	Fence	0.03
## 5923	Utilities	Fence	-0.01
## 5924	LotConfig	Fence	-0.02
## 5925	LandSlope	Fence	-0.03
## 5926	Neighborhood	Fence	0.00
## 5927	Condition1	Fence	-0.06
## 5928	Condition2	Fence	0.00
## 5929	BldgType	Fence	-0.15
## 5930	HouseStyle	Fence	-0.06
## 5931	OverallQual	Fence	-0.21
## 5932	OverallCond	Fence	0.16
## 5933	YearBuilt	Fence	-0.22
## 5934	YearRemodAdd	Fence	-0.17
## 5935	RoofStyle	Fence	0.01
## 5936	RoofMatl	Fence	-0.01
## 5937	Exterior1st	Fence	-0.12
## 5938	Exterior2nd	Fence	-0.10
## 5939	MasVnrType	Fence	-0.03
## 5940	MasVnrArea	Fence	-0.11
## 5941	ExterQual	Fence	0.24
## 5942	ExterCond	Fence	-0.09
## 5943	Foundation	Fence	-0.20
## 5944	BsmtQual	Fence	0.20
## 5945	BsmtCond	Fence	0.03
## 5946	BsmtExposure	Fence	0.07
## 5947	BsmtFinType1	Fence	-0.04
## 5948	BsmtFinSF1	Fence	-0.01
## 5949	BsmtFinType2	Fence	-0.09

## 5950	BsmtFinSF2	Fence	0.11
## 5951	BsmtUnfSF	Fence	-0.14
## 5952	TotalBsmtSF	Fence	-0.11
## 5953	Heating	Fence	0.00
## 5954	HeatingQC	Fence	0.22
## 5955	CentralAir	Fence	0.01
## 5956	Electrical	Fence	-0.02
## 5957	X1stFlrSF	Fence	-0.09
## 5958	X2ndFlrSF	Fence	-0.09
## 5959	LowQualFinSF	Fence	0.04
## 5960	GrLivArea	Fence	-0.13
## 5961	BsmtFullBath	Fence	0.01
## 5962	BsmtHalfBath	Fence	0.04
## 5963	FullBath	Fence	-0.22
## 5964	HalfBath	Fence	-0.09
## 5965	BedroomAbvGr	Fence	0.01
## 5966	KitchenAbvGr	Fence	-0.05
## 5967	KitchenQual	Fence	0.15
## 5968	TotRmsAbvGrd	Fence	-0.09
## 5969	Functional	Fence	-0.07
## 5970	Fireplaces	Fence	-0.06
## 5971	FireplaceQu	Fence	-0.07
## 5972	GarageType	Fence	0.07
## 5973	GarageYrBlt	Fence	-0.02
## 5974	GarageFinish	Fence	0.13
## 5975	GarageCars	Fence	-0.19
## 5976	GarageArea	Fence	-0.15
## 5977	GarageQual	Fence	-0.02
## 5978	GarageCond	Fence	-0.02
## 5979	PavedDrive	Fence	-0.03
## 5980	WoodDeckSF	Fence	0.02
## 5981	OpenPorchSF	Fence	-0.07
## 5982	EnclosedPorch	Fence	0.06
## 5983	X3SsnPorch	Fence	0.02
## 5984	ScreenPorch	Fence	0.01
## 5985	PoolArea	Fence	0.06
## 5986	PoolQC	Fence	0.05
## 5987	Fence	Fence	1.00
## 5988	MiscFeature	Fence	0.13
## 5989	MiscVal	Fence	0.03
## 5990	MoSold	Fence	0.00
## 5991	YrSold	Fence	0.04
## 5992	SaleType	Fence	0.01
## 5993	SaleCondition	Fence	-0.11
## 5994	SalePrice	Fence	-0.18
## 5995	Id	MiscFeature	-0.04
## 5996	MSSubClass	MiscFeature	-0.05
## 5997	MSZoning	MiscFeature	0.00
## 5998	LotFrontage	MiscFeature	-0.03
## 5999	LotArea	MiscFeature	0.11
## 6000	Street	MiscFeature	-0.16
## 6001	Alley	MiscFeature	-0.01
## 6002	LotShape	MiscFeature	-0.01
## 6003	LandContour	MiscFeature	0.01

## 6004	Utilities	MiscFeature	-0.01
## 6005	LotConfig	MiscFeature	-0.02
## 6006	LandSlope	MiscFeature	0.05
## 6007	Neighborhood	MiscFeature	-0.02
## 6008	Condition1	MiscFeature	0.01
## 6009	Condition2	MiscFeature	-0.01
## 6010	BldgType	MiscFeature	-0.06
## 6011	HouseStyle	MiscFeature	-0.05
## 6012	OverallQual	MiscFeature	-0.09
## 6013	OverallCond	MiscFeature	0.07
## 6014	YearBuilt	MiscFeature	-0.08
## 6015	YearRemodAdd	MiscFeature	-0.09
## 6016	RoofStyle	MiscFeature	0.00
## 6017	RoofMatl	MiscFeature	-0.02
## 6018	Exterior1st	MiscFeature	-0.01
## 6019	Exterior2nd	MiscFeature	-0.02
## 6020	MasVnrType	MiscFeature	-0.01
## 6021	MasVnrArea	MiscFeature	-0.05
## 6022	ExterQual	MiscFeature	0.03
## 6023	ExterCond	MiscFeature	0.00
## 6024	Foundation	MiscFeature	-0.03
## 6025	BsmtQual	MiscFeature	0.04
## 6026	BsmtCond	MiscFeature	-0.01
## 6027	BsmtExposure	MiscFeature	0.02
## 6028	BsmtFinType1	MiscFeature	-0.06
## 6029	BsmtFinSF1	MiscFeature	-0.01
## 6030	BsmtFinType2	MiscFeature	-0.05
## 6031	BsmtFinSF2	MiscFeature	-0.01
## 6032	BsmtUnfSF	MiscFeature	-0.05
## 6033	TotalBsmtSF	MiscFeature	-0.07
## 6034	Heating	MiscFeature	-0.01
## 6035	HeatingQC	MiscFeature	0.03
## 6036	CentralAir	MiscFeature	0.00
## 6037	Electrical	MiscFeature	0.03
## 6038	X1stFlrSF	MiscFeature	-0.05
## 6039	X2ndFlrSF	MiscFeature	-0.01
## 6040	LowQualFinSF	MiscFeature	0.03
## 6041	GrLivArea	MiscFeature	-0.04
## 6042	BsmtFullBath	MiscFeature	0.00
## 6043	BsmtHalfBath	MiscFeature	0.03
## 6044	FullBath	MiscFeature	-0.05
## 6045	HalfBath	MiscFeature	-0.04
## 6046	BedroomAbvGr	MiscFeature	0.01
## 6047	KitchenAbvGr	MiscFeature	0.01
## 6048	KitchenQual	MiscFeature	0.07
## 6049	TotRmsAbvGrd	MiscFeature	-0.02
## 6050	Functional	MiscFeature	-0.06
## 6051	Fireplaces	MiscFeature	0.00
## 6052	FireplaceQu	MiscFeature	0.01
## 6053	GarageType	MiscFeature	0.01
## 6054	GarageYrBlt	MiscFeature	0.00
## 6055	GarageFinish	MiscFeature	0.03
## 6056	GarageCars	MiscFeature	-0.06
## 6057	GarageArea	MiscFeature	-0.04

## 6058	GarageQual	MiscFeature	-0.02
## 6059	GarageCond	MiscFeature	-0.01
## 6060	PavedDrive	MiscFeature	0.00
## 6061	WoodDeckSF	MiscFeature	0.03
## 6062	OpenPorchSF	MiscFeature	0.00
## 6063	EnclosedPorch	MiscFeature	0.03
## 6064	X3SsnPorch	MiscFeature	0.02
## 6065	ScreenPorch	MiscFeature	0.06
## 6066	PoolArea	MiscFeature	0.05
## 6067	PoolQC	MiscFeature	0.05
## 6068	Fence	MiscFeature	0.13
## 6069	MiscFeature	MiscFeature	1.00
## 6070	MiscVal	MiscFeature	0.33
## 6071	MoSold	MiscFeature	0.01
## 6072	YrSold	MiscFeature	0.06
## 6073	SaleType	MiscFeature	-0.01
## 6074	SaleCondition	MiscFeature	-0.01
## 6075	SalePrice	MiscFeature	-0.07
## 6076	Id	MiscVal	-0.01
## 6077	MSSubClass	MiscVal	-0.01
## 6078	MSZoning	MiscVal	0.01
## 6079	LotFrontage	MiscVal	-0.06
## 6080	LotArea	MiscVal	0.04
## 6081	Street	MiscVal	-0.02
## 6082	Alley	MiscVal	-0.01
## 6083	LotShape	MiscVal	-0.04
## 6084	LandContour	MiscVal	0.02
## 6085	Utilities	MiscVal	0.00
## 6086	LotConfig	MiscVal	-0.02
## 6087	LandSlope	MiscVal	0.00
## 6088	Neighborhood	MiscVal	0.00
## 6089	Condition1	MiscVal	-0.01
## 6090	Condition2	MiscVal	0.13
## 6091	BldgType	MiscVal	-0.01
## 6092	HouseStyle	MiscVal	-0.04
## 6093	OverallQual	MiscVal	-0.03
## 6094	OverallCond	MiscVal	0.07
## 6095	YearBuilt	MiscVal	-0.03
## 6096	YearRemodAdd	MiscVal	-0.01
## 6097	RoofStyle	MiscVal	0.10
## 6098	RoofMatl	MiscVal	-0.01
## 6099	Exterior1st	MiscVal	-0.02
## 6100	Exterior2nd	MiscVal	-0.01
## 6101	MasVnrType	MiscVal	0.01
## 6102	MasVnrArea	MiscVal	-0.03
## 6103	ExterQual	MiscVal	0.01
## 6104	ExterCond	MiscVal	-0.07
## 6105	Foundation	MiscVal	0.00
## 6106	BsmtQual	MiscVal	0.01
## 6107	BsmtCond	MiscVal	-0.02
## 6108	BsmtExposure	MiscVal	0.00
## 6109	BsmtFinType1	MiscVal	-0.05
## 6110	BsmtFinSF1	MiscVal	0.00
## 6111	BsmtFinType2	MiscVal	-0.03

## 6112	BsmtFinSF2	MiscVal	0.00
## 6113	BsmtUnfSF	MiscVal	-0.02
## 6114	TotalBsmtSF	MiscVal	-0.02
## 6115	Heating	MiscVal	-0.01
## 6116	HeatingQC	MiscVal	0.02
## 6117	CentralAir	MiscVal	0.00
## 6118	Electrical	MiscVal	0.02
## 6119	X1stFlrSF	MiscVal	-0.02
## 6120	X2ndFlrSF	MiscVal	0.02
## 6121	LowQualFinSF	MiscVal	0.00
## 6122	GrLivArea	MiscVal	0.00
## 6123	BsmtFullBath	MiscVal	-0.02
## 6124	BsmtHalfBath	MiscVal	-0.01
## 6125	FullBath	MiscVal	-0.01
## 6126	HalfBath	MiscVal	0.00
## 6127	BedroomAbvGr	MiscVal	0.01
## 6128	KitchenAbvGr	MiscVal	0.06
## 6129	KitchenQual	MiscVal	0.04
## 6130	TotRmsAbvGrd	MiscVal	0.02
## 6131	Functional	MiscVal	-0.02
## 6132	Fireplaces	MiscVal	0.00
## 6133	FireplaceQu	MiscVal	0.01
## 6134	GarageType	MiscVal	-0.01
## 6135	GarageYrBlt	MiscVal	-0.01
## 6136	GarageFinish	MiscVal	0.00
## 6137	GarageCars	MiscVal	-0.04
## 6138	GarageArea	MiscVal	-0.03
## 6139	GarageQual	MiscVal	-0.01
## 6140	GarageCond	MiscVal	0.00
## 6141	PavedDrive	MiscVal	-0.04
## 6142	WoodDeckSF	MiscVal	-0.01
## 6143	OpenPorchSF	MiscVal	-0.02
## 6144	EnclosedPorch	MiscVal	0.02
## 6145	X3SsnPorch	MiscVal	0.00
## 6146	ScreenPorch	MiscVal	0.03
## 6147	PoolArea	MiscVal	0.03
## 6148	PoolQC	MiscVal	0.03
## 6149	Fence	MiscVal	0.03
## 6150	MiscFeature	MiscVal	0.33
## 6151	MiscVal	MiscVal	1.00
## 6152	MoSold	MiscVal	-0.01
## 6153	YrSold	MiscVal	0.00
## 6154	SaleType	MiscVal	0.01
## 6155	SaleCondition	MiscVal	0.01
## 6156	SalePrice	MiscVal	-0.02
## 6157	Id	MoSold	0.02
## 6158	MSSubClass	MoSold	-0.01
## 6159	MSZoning	MoSold	-0.03
## 6160	LotFrontage	MoSold	0.02
## 6161	LotArea	MoSold	0.00
## 6162	Street	MoSold	0.00
## 6163	Alley	MoSold	-0.02
## 6164	LotShape	MoSold	-0.03
## 6165	LandContour	MoSold	-0.01

## 6166	Utilities	MoSold	-0.05
## 6167	LotConfig	MoSold	0.02
## 6168	LandSlope	MoSold	0.01
## 6169	Neighborhood	MoSold	0.02
## 6170	Condition1	MoSold	-0.01
## 6171	Condition2	MoSold	0.00
## 6172	BldgType	MoSold	-0.03
## 6173	HouseStyle	MoSold	0.03
## 6174	OverallQual	MoSold	0.07
## 6175	OverallCond	MoSold	0.00
## 6176	YearBuilt	MoSold	0.01
## 6177	YearRemodAdd	MoSold	0.02
## 6178	RoofStyle	MoSold	0.01
## 6179	RoofMatl	MoSold	0.03
## 6180	Exterior1st	MoSold	0.00
## 6181	Exterior2nd	MoSold	-0.02
## 6182	MasVnrType	MoSold	0.00
## 6183	MasVnrArea	MoSold	-0.01
## 6184	ExterQual	MoSold	-0.02
## 6185	ExterCond	MoSold	0.02
## 6186	Foundation	MoSold	0.00
## 6187	BsmtQual	MoSold	0.00
## 6188	BsmtCond	MoSold	-0.01
## 6189	BsmtExposure	MoSold	-0.01
## 6190	BsmtFinType1	MoSold	0.04
## 6191	BsmtFinSF1	MoSold	-0.02
## 6192	BsmtFinType2	MoSold	0.02
## 6193	BsmtFinSF2	MoSold	-0.02
## 6194	BsmtUnfSF	MoSold	0.03
## 6195	TotalBsmtSF	MoSold	0.01
## 6196	Heating	MoSold	-0.01
## 6197	HeatingQC	MoSold	0.00
## 6198	CentralAir	MoSold	0.01
## 6199	Electrical	MoSold	-0.01
## 6200	X1stFlrSF	MoSold	0.03
## 6201	X2ndFlrSF	MoSold	0.04
## 6202	LowQualFinSF	MoSold	-0.02
## 6203	GrLivArea	MoSold	0.05
## 6204	BsmtFullBath	MoSold	-0.03
## 6205	BsmtHalfBath	MoSold	0.03
## 6206	FullBath	MoSold	0.06
## 6207	HalfBath	MoSold	-0.01
## 6208	BedroomAbvGr	MoSold	0.05
## 6209	KitchenAbvGr	MoSold	0.03
## 6210	KitchenQual	MoSold	-0.04
## 6211	TotRmsAbvGrd	MoSold	0.04
## 6212	Functional	MoSold	0.03
## 6213	Fireplaces	MoSold	0.05
## 6214	FireplaceQu	MoSold	0.04
## 6215	GarageType	MoSold	0.01
## 6216	GarageYrBlt	MoSold	0.02
## 6217	GarageFinish	MoSold	0.02
## 6218	GarageCars	MoSold	0.04
## 6219	GarageArea	MoSold	0.03

## 6220	GarageQual	MoSold	0.02
## 6221	GarageCond	MoSold	0.02
## 6222	PavedDrive	MoSold	0.02
## 6223	WoodDeckSF	MoSold	0.02
## 6224	OpenPorchSF	MoSold	0.07
## 6225	EnclosedPorch	MoSold	-0.03
## 6226	X3SsnPorch	MoSold	0.03
## 6227	ScreenPorch	MoSold	0.02
## 6228	PoolArea	MoSold	-0.03
## 6229	PoolQC	MoSold	-0.03
## 6230	Fence	MoSold	0.00
## 6231	MiscFeature	MoSold	0.01
## 6232	MiscVal	MoSold	-0.01
## 6233	MoSold	MoSold	1.00
## 6234	YrSold	MoSold	-0.15
## 6235	SaleType	MoSold	-0.05
## 6236	SaleCondition	MoSold	0.01
## 6237	SalePrice	MoSold	0.05
## 6238	Id	YrSold	0.00
## 6239	MSSubClass	YrSold	-0.02
## 6240	MSZoning	YrSold	-0.02
## 6241	LotFrontage	YrSold	-0.01
## 6242	LotArea	YrSold	-0.01
## 6243	Street	YrSold	-0.03
## 6244	Alley	YrSold	-0.01
## 6245	LotShape	YrSold	0.04
## 6246	LandContour	YrSold	0.02
## 6247	Utilities	YrSold	0.02
## 6248	LotConfig	YrSold	-0.01
## 6249	LandSlope	YrSold	0.00
## 6250	Neighborhood	YrSold	0.04
## 6251	Condition1	YrSold	-0.01
## 6252	Condition2	YrSold	-0.02
## 6253	BldgType	YrSold	0.00
## 6254	HouseStyle	YrSold	-0.02
## 6255	OverallQual	YrSold	-0.03
## 6256	OverallCond	YrSold	0.04
## 6257	YearBuilt	YrSold	-0.01
## 6258	YearRemodAdd	YrSold	0.04
## 6259	RoofStyle	YrSold	0.02
## 6260	RoofMatl	YrSold	-0.03
## 6261	Exterior1st	YrSold	-0.04
## 6262	Exterior2nd	YrSold	-0.03
## 6263	MasVnrType	YrSold	0.06
## 6264	MasVnrArea	YrSold	-0.01
## 6265	ExterQual	YrSold	-0.04
## 6266	ExterCond	YrSold	-0.03
## 6267	Foundation	YrSold	0.01
## 6268	BsmtQual	YrSold	0.00
## 6269	BsmtCond	YrSold	0.04
## 6270	BsmtExposure	YrSold	0.04
## 6271	BsmtFinType1	YrSold	-0.05
## 6272	BsmtFinSF1	YrSold	0.01
## 6273	BsmtFinType2	YrSold	-0.05

## 6274	BsmtFinSF2	YrSold	0.03
## 6275	BsmtUnfSF	YrSold	-0.04
## 6276	TotalBsmtSF	YrSold	-0.01
## 6277	Heating	YrSold	0.01
## 6278	HeatingQC	YrSold	0.01
## 6279	CentralAir	YrSold	-0.01
## 6280	Electrical	YrSold	0.03
## 6281	X1stFlrSF	YrSold	-0.01
## 6282	X2ndFlrSF	YrSold	-0.03
## 6283	LowQualFinSF	YrSold	-0.03
## 6284	GrLivArea	YrSold	-0.04
## 6285	BsmtFullBath	YrSold	0.07
## 6286	BsmtHalfBath	YrSold	-0.05
## 6287	FullBath	YrSold	-0.02
## 6288	HalfBath	YrSold	-0.01
## 6289	BedroomAbvGr	YrSold	-0.04
## 6290	KitchenAbvGr	YrSold	0.03
## 6291	KitchenQual	YrSold	-0.01
## 6292	TotRmsAbvGrd	YrSold	-0.03
## 6293	Functional	YrSold	-0.02
## 6294	Fireplaces	YrSold	-0.02
## 6295	FireplaceQu	YrSold	-0.04
## 6296	GarageType	YrSold	0.00
## 6297	GarageYrBlt	YrSold	-0.01
## 6298	GarageFinish	YrSold	-0.01
## 6299	GarageCars	YrSold	-0.04
## 6300	GarageArea	YrSold	-0.03
## 6301	GarageQual	YrSold	0.01
## 6302	GarageCond	YrSold	0.00
## 6303	PavedDrive	YrSold	0.01
## 6304	WoodDeckSF	YrSold	0.02
## 6305	OpenPorchSF	YrSold	-0.06
## 6306	EnclosedPorch	YrSold	-0.01
## 6307	X3SsnPorch	YrSold	0.02
## 6308	ScreenPorch	YrSold	0.01
## 6309	PoolArea	YrSold	-0.06
## 6310	PoolQC	YrSold	-0.05
## 6311	Fence	YrSold	0.04
## 6312	MiscFeature	YrSold	0.06
## 6313	MiscVal	YrSold	0.00
## 6314	MoSold	YrSold	-0.15
## 6315	YrSold	YrSold	1.00
## 6316	SaleType	YrSold	-0.01
## 6317	SaleCondition	YrSold	0.00
## 6318	SalePrice	YrSold	-0.03
## 6319	Id	SaleType	0.03
## 6320	MSSubClass	SaleType	0.01
## 6321	MSZoning	SaleType	0.10
## 6322	LotFrontage	SaleType	-0.04
## 6323	LotArea	SaleType	0.01
## 6324	Street	SaleType	0.02
## 6325	Alley	SaleType	0.00
## 6326	LotShape	SaleType	0.00
## 6327	LandContour	SaleType	-0.02

## 6328	Utilities	SaleType	-0.13
## 6329	LotConfig	SaleType	0.02
## 6330	LandSlope	SaleType	0.06
## 6331	Neighborhood	SaleType	-0.03
## 6332	Condition1	SaleType	-0.01
## 6333	Condition2	SaleType	0.01
## 6334	BldgType	SaleType	-0.04
## 6335	HouseStyle	SaleType	0.05
## 6336	OverallQual	SaleType	-0.05
## 6337	OverallCond	SaleType	0.10
## 6338	YearBuilt	SaleType	-0.05
## 6339	YearRemodAdd	SaleType	0.02
## 6340	RoofStyle	SaleType	-0.03
## 6341	RoofMatl	SaleType	0.01
## 6342	Exterior1st	SaleType	0.01
## 6343	Exterior2nd	SaleType	0.02
## 6344	MasVnrType	SaleType	-0.02
## 6345	MasVnrArea	SaleType	-0.06
## 6346	ExterQual	SaleType	0.09
## 6347	ExterCond	SaleType	0.01
## 6348	Foundation	SaleType	0.01
## 6349	BsmtQual	SaleType	0.04
## 6350	BsmtCond	SaleType	0.02
## 6351	BsmtExposure	SaleType	-0.01
## 6352	BsmtFinType1	SaleType	-0.06
## 6353	BsmtFinSF1	SaleType	0.01
## 6354	BsmtFinType2	SaleType	-0.03
## 6355	BsmtFinSF2	SaleType	-0.02
## 6356	BsmtUnfSF	SaleType	-0.09
## 6357	TotalBsmtSF	SaleType	-0.09
## 6358	Heating	SaleType	0.01
## 6359	HeatingQC	SaleType	-0.02
## 6360	CentralAir	SaleType	0.00
## 6361	Electrical	SaleType	0.01
## 6362	X1stFlrSF	SaleType	-0.11
## 6363	X2ndFlrSF	SaleType	0.05
## 6364	LowQualFinSF	SaleType	0.01
## 6365	GrLivArea	SaleType	-0.04
## 6366	BsmtFullBath	SaleType	0.03
## 6367	BsmtHalfBath	SaleType	0.01
## 6368	FullBath	SaleType	-0.03
## 6369	HalfBath	SaleType	0.03
## 6370	BedroomAbvGr	SaleType	0.04
## 6371	KitchenAbvGr	SaleType	-0.01
## 6372	KitchenQual	SaleType	0.04
## 6373	TotRmsAbvGrd	SaleType	-0.04
## 6374	Functional	SaleType	-0.01
## 6375	Fireplaces	SaleType	0.02
## 6376	FireplaceQu	SaleType	0.05
## 6377	GarageType	SaleType	0.02
## 6378	GarageYrBlt	SaleType	-0.03
## 6379	GarageFinish	SaleType	0.02
## 6380	GarageCars	SaleType	-0.07
## 6381	GarageArea	SaleType	-0.09

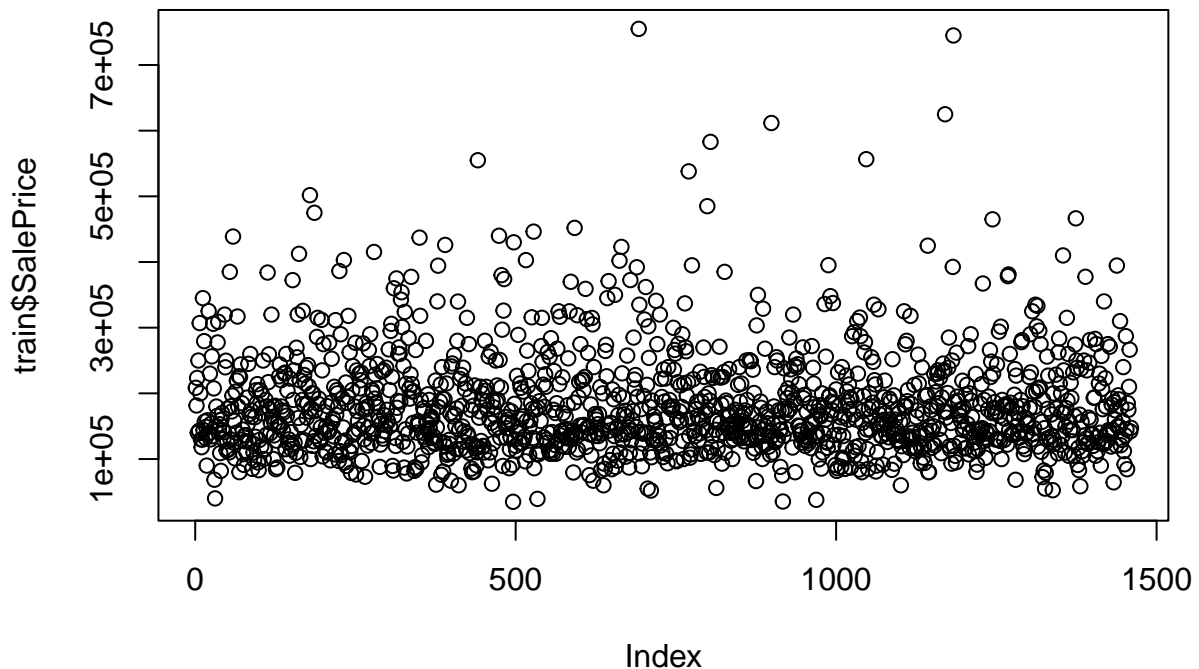
## 6382	GarageQual	SaleType	-0.04
## 6383	GarageCond	SaleType	-0.03
## 6384	PavedDrive	SaleType	-0.03
## 6385	WoodDeckSF	SaleType	0.06
## 6386	OpenPorchSF	SaleType	-0.01
## 6387	EnclosedPorch	SaleType	-0.02
## 6388	X3SsnPorch	SaleType	-0.01
## 6389	ScreenPorch	SaleType	0.01
## 6390	PoolArea	SaleType	0.01
## 6391	PoolQC	SaleType	0.00
## 6392	Fence	SaleType	0.01
## 6393	MiscFeature	SaleType	-0.01
## 6394	MiscVal	SaleType	0.01
## 6395	MoSold	SaleType	-0.05
## 6396	YrSold	SaleType	-0.01
## 6397	SaleType	SaleType	1.00
## 6398	SaleCondition	SaleType	0.18
## 6399	SalePrice	SaleType	-0.05
## 6400	Id	SaleCondition	-0.01
## 6401	MSSubClass	SaleCondition	-0.02
## 6402	MSZoning	SaleCondition	0.01
## 6403	LotFrontage	SaleCondition	0.05
## 6404	LotArea	SaleCondition	0.03
## 6405	Street	SaleCondition	0.01
## 6406	Alley	SaleCondition	-0.04
## 6407	LotShape	SaleCondition	-0.04
## 6408	LandContour	SaleCondition	0.03
## 6409	Utilities	SaleCondition	-0.09
## 6410	LotConfig	SaleCondition	0.05
## 6411	LandSlope	SaleCondition	-0.04
## 6412	Neighborhood	SaleCondition	0.01
## 6413	Condition1	SaleCondition	0.06
## 6414	Condition2	SaleCondition	0.05
## 6415	BldgType	SaleCondition	0.00
## 6416	HouseStyle	SaleCondition	0.02
## 6417	OverallQual	SaleCondition	0.19
## 6418	OverallCond	SaleCondition	0.02
## 6419	YearBuilt	SaleCondition	0.20
## 6420	YearRemodAdd	SaleCondition	0.22
## 6421	RoofStyle	SaleCondition	0.07
## 6422	RoofMatl	SaleCondition	-0.05
## 6423	Exterior1st	SaleCondition	0.06
## 6424	Exterior2nd	SaleCondition	0.07
## 6425	MasVnrType	SaleCondition	0.07
## 6426	MasVnrArea	SaleCondition	0.09
## 6427	ExterQual	SaleCondition	-0.19
## 6428	ExterCond	SaleCondition	0.05
## 6429	Foundation	SaleCondition	0.14
## 6430	BsmtQual	SaleCondition	-0.15
## 6431	BsmtCond	SaleCondition	0.03
## 6432	BsmtExposure	SaleCondition	-0.06
## 6433	BsmtFinType1	SaleCondition	0.02
## 6434	BsmtFinSF1	SaleCondition	0.03
## 6435	BsmtFinType2	SaleCondition	0.04

## 6436	BsmtFinSF2	SaleCondition	-0.06
## 6437	BsmtUnfSF	SaleCondition	0.10
## 6438	TotalBsmtSF	SaleCondition	0.11
## 6439	Heating	SaleCondition	0.01
## 6440	HeatingQC	SaleCondition	-0.17
## 6441	CentralAir	SaleCondition	0.07
## 6442	Electrical	SaleCondition	0.10
## 6443	X1stFlrSF	SaleCondition	0.08
## 6444	X2ndFlrSF	SaleCondition	0.04
## 6445	LowQualFinSF	SaleCondition	-0.07
## 6446	GrLivArea	SaleCondition	0.08
## 6447	BsmtFullBath	SaleCondition	0.01
## 6448	BsmtHalfBath	SaleCondition	-0.06
## 6449	FullBath	SaleCondition	0.14
## 6450	HalfBath	SaleCondition	0.07
## 6451	BedroomAbvGr	SaleCondition	-0.02
## 6452	KitchenAbvGr	SaleCondition	-0.07
## 6453	KitchenQual	SaleCondition	-0.13
## 6454	TotRmsAbvGrd	SaleCondition	0.07
## 6455	Functional	SaleCondition	0.02
## 6456	Fireplaces	SaleCondition	0.11
## 6457	FireplaceQu	SaleCondition	0.10
## 6458	GarageType	SaleCondition	-0.04
## 6459	GarageYrBlt	SaleCondition	0.14
## 6460	GarageFinish	SaleCondition	-0.05
## 6461	GarageCars	SaleCondition	0.18
## 6462	GarageArea	SaleCondition	0.18
## 6463	GarageQual	SaleCondition	0.14
## 6464	GarageCond	SaleCondition	0.13
## 6465	PavedDrive	SaleCondition	0.07
## 6466	WoodDeckSF	SaleCondition	0.06
## 6467	OpenPorchSF	SaleCondition	0.06
## 6468	EnclosedPorch	SaleCondition	-0.10
## 6469	X3SsnPorch	SaleCondition	0.00
## 6470	ScreenPorch	SaleCondition	-0.02
## 6471	PoolArea	SaleCondition	-0.07
## 6472	PoolQC	SaleCondition	-0.03
## 6473	Fence	SaleCondition	-0.11
## 6474	MiscFeature	SaleCondition	-0.01
## 6475	MiscVal	SaleCondition	0.01
## 6476	MoSold	SaleCondition	0.01
## 6477	YrSold	SaleCondition	0.00
## 6478	SaleType	SaleCondition	0.18
## 6479	SaleCondition	SaleCondition	1.00
## 6480	SalePrice	SaleCondition	0.21
## 6481	Id	SalePrice	-0.02
## 6482	MSSubClass	SalePrice	-0.08
## 6483	MSZoning	SalePrice	-0.17
## 6484	LotFrontage	SalePrice	0.21
## 6485	LotArea	SalePrice	0.26
## 6486	Street	SalePrice	0.04
## 6487	Alley	SalePrice	-0.09
## 6488	LotShape	SalePrice	-0.26
## 6489	LandContour	SalePrice	0.02

## 6490	Utilities	SalePrice	-0.01
## 6491	LotConfig	SalePrice	-0.07
## 6492	LandSlope	SalePrice	0.05
## 6493	Neighborhood	SalePrice	0.17
## 6494	Condition1	SalePrice	0.09
## 6495	Condition2	SalePrice	0.01
## 6496	BldgType	SalePrice	-0.09
## 6497	HouseStyle	SalePrice	0.18
## 6498	OverallQual	SalePrice	0.79
## 6499	OverallCond	SalePrice	-0.08
## 6500	YearBuilt	SalePrice	0.52
## 6501	YearRemodAdd	SalePrice	0.51
## 6502	RoofStyle	SalePrice	0.22
## 6503	RoofMatl	SalePrice	0.13
## 6504	Exterior1st	SalePrice	0.10
## 6505	Exterior2nd	SalePrice	0.10
## 6506	MasVnrType	SalePrice	0.00
## 6507	MasVnrArea	SalePrice	0.47
## 6508	ExterQual	SalePrice	-0.64
## 6509	ExterCond	SalePrice	0.12
## 6510	Foundation	SalePrice	0.38
## 6511	BsmtQual	SalePrice	-0.44
## 6512	BsmtCond	SalePrice	0.15
## 6513	BsmtExposure	SalePrice	-0.19
## 6514	BsmtFinType1	SalePrice	-0.01
## 6515	BsmtFinSF1	SalePrice	0.39
## 6516	BsmtFinType2	SalePrice	0.13
## 6517	BsmtFinSF2	SalePrice	-0.01
## 6518	BsmtUnfSF	SalePrice	0.21
## 6519	TotalBsmtSF	SalePrice	0.61
## 6520	Heating	SalePrice	-0.10
## 6521	HeatingQC	SalePrice	-0.40
## 6522	CentralAir	SalePrice	0.25
## 6523	Electrical	SalePrice	0.23
## 6524	X1stFlrSF	SalePrice	0.61
## 6525	X2ndFlrSF	SalePrice	0.32
## 6526	LowQualFinSF	SalePrice	-0.03
## 6527	GrLivArea	SalePrice	0.71
## 6528	BsmtFullBath	SalePrice	0.23
## 6529	BsmtHalfBath	SalePrice	-0.02
## 6530	FullBath	SalePrice	0.56
## 6531	HalfBath	SalePrice	0.28
## 6532	BedroomAbvGr	SalePrice	0.17
## 6533	KitchenAbvGr	SalePrice	-0.14
## 6534	KitchenQual	SalePrice	-0.59
## 6535	TotRmsAbvGrd	SalePrice	0.53
## 6536	Functional	SalePrice	0.12
## 6537	Fireplaces	SalePrice	0.47
## 6538	FireplaceQu	SalePrice	0.38
## 6539	GarageType	SalePrice	-0.22
## 6540	GarageYrBlt	SalePrice	0.26
## 6541	GarageFinish	SalePrice	-0.29
## 6542	GarageCars	SalePrice	0.64
## 6543	GarageArea	SalePrice	0.62

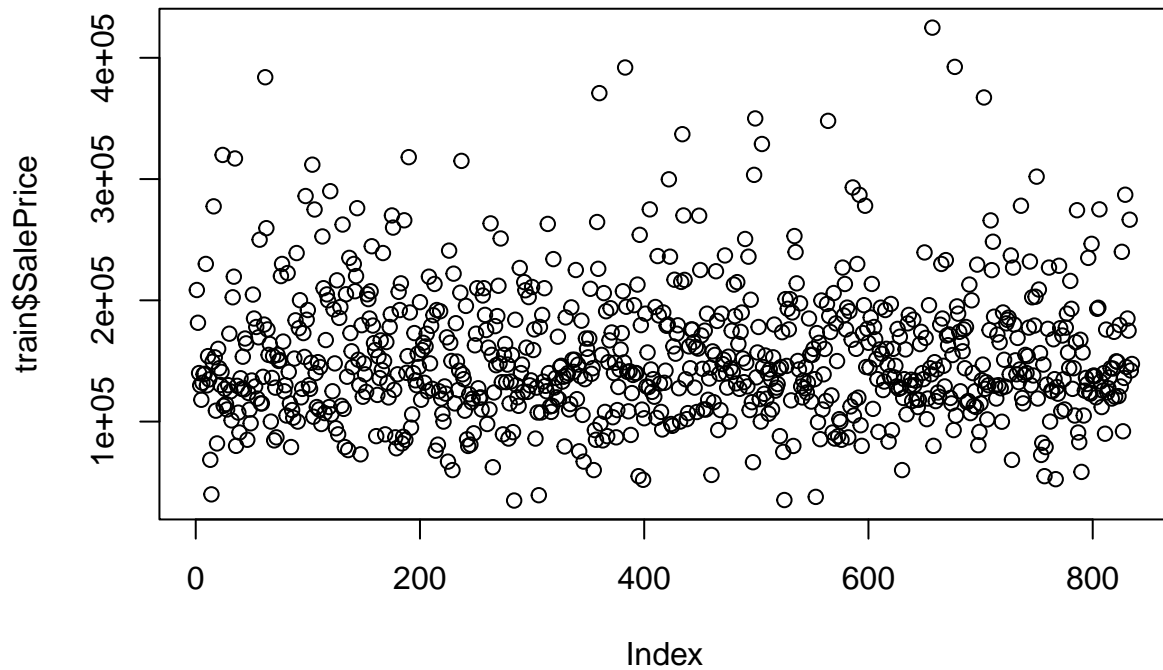
```
## 6544    GarageQual    SalePrice  0.26
## 6545    GarageCond    SalePrice  0.28
## 6546    PavedDrive    SalePrice  0.23
## 6547    WoodDeckSF    SalePrice  0.32
## 6548    OpenPorchSF   SalePrice  0.32
## 6549    EnclosedPorch SalePrice -0.13
## 6550    X3SsnPorch    SalePrice  0.04
## 6551    ScreenPorch   SalePrice  0.11
## 6552    PoolArea      SalePrice  0.09
## 6553    PoolQC        SalePrice  0.05
## 6554    Fence         SalePrice -0.18
## 6555    MiscFeature    SalePrice -0.07
## 6556    MiscVal        SalePrice -0.02
## 6557    MoSold        SalePrice  0.05
## 6558    YrSold         SalePrice -0.03
## 6559    SaleType       SalePrice -0.05
## 6560    SaleCondition  SalePrice  0.21
## 6561    SalePrice      SalePrice  1.00
```

```
#Seeing the distribution of the response variable
plot(train$SalePrice)
```

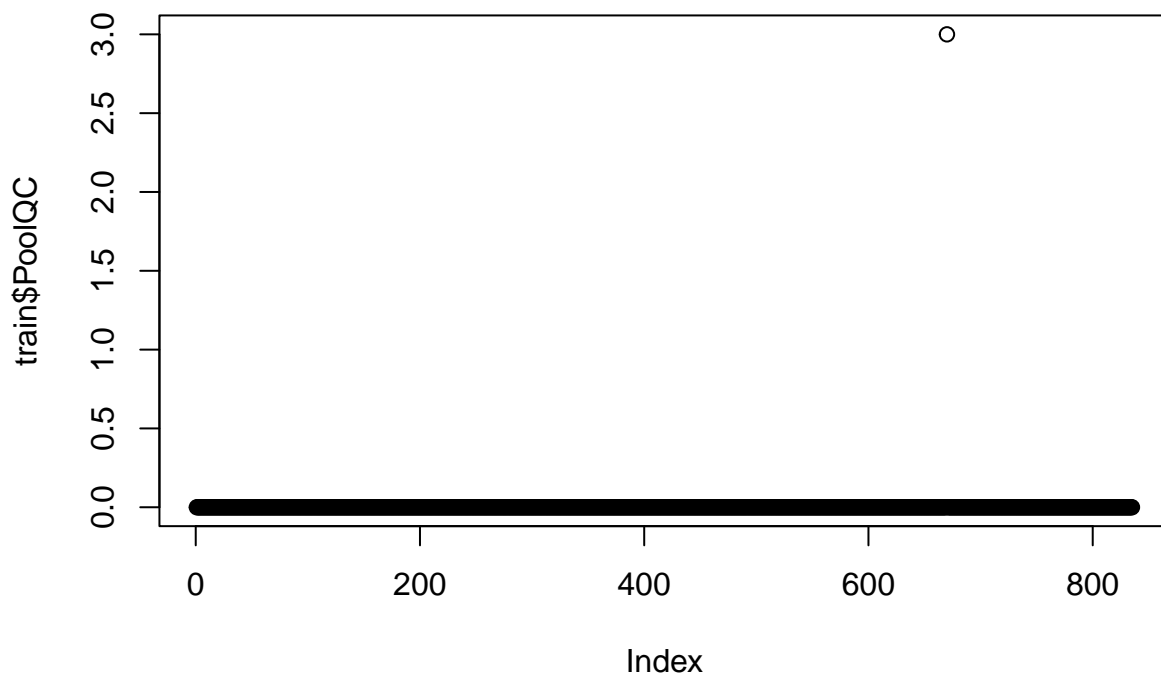


```
#dropping all the rows that have a sale price above 500,000
train<- train[!(train$SalePrice > 500000),]
#dropping rows that lot areas are above 10000
```

```
train <- train[!(train$LotArea > 10000),]  
#dropping all houses built in the 1800s  
train <- train[!(train$YearBuilt < 1900),]  
  
plot(train$SalePrice)
```



```
#there does seem to be much need for this column so it will be dropped in the custom model  
plot(train$PoolQC)
```



#Stepwise Regression using Forward and Backward

```
library(tidyverse)
```

```
## -- Attaching packages ----- tidyverse 1.3.2 --
## v tibble  3.1.8      v dplyr   1.0.10
## v tidyr   1.2.1      v stringr 1.5.0
## v readr   2.1.3      v forcats 0.5.2
## v purrr   1.0.0
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
## x dplyr::src()    masks Hmisc::src()
## x dplyr::summarize() masks Hmisc::summarize()
```

```
library(caret)
```

```
##
## Attaching package: 'caret'
##
## The following object is masked from 'package:purrr':
##
##   lift
```

```
library(leaps)
```

```
## Warning: package 'leaps' was built under R version 4.2.3
```

```
library(MASS)
```

```
## Warning: package 'MASS' was built under R version 4.2.3
```

```
##
## Attaching package: 'MASS'
##
## The following object is masked from 'package:dplyr':
##
##     select
```

```
#model with only intercept
```

```
inter.model <- lm(formula = SalePrice ~ 1, data = train)
```

```
#model with all variables
```

```
full.model <- lm(formula = SalePrice~.-SalePrice, data = train)
```

```
#stepwise regression model
```

```
step.model <- stepAIC(inter.model, scope = list(upper = full.model, lower = inter.model), direction = "b")
```

```
#summary of the model
```

```
summary(step.model)
```

```
##
```

```
## Call:
```

```
## lm(formula = SalePrice ~ OverallQual + GrLivArea + YearBuilt +
##      BsmtFinSF1 + MSSubClass + KitchenQual + OverallCond + ExterQual +
##      TotalBsmtSF + GarageArea + Functional + BsmtQual + SaleCondition +
##      ScreenPorch + FireplaceQu + HeatingQC + LotArea + KitchenAbvGr +
##      Street + BedroomAbvGr + MasVnrType + BsmtCond + TotRmsAbvGrd +
##      BsmtFinSF2 + Condition1 + Exterior1st + YearRemodAdd + X2ndFlrSF +
##      LandContour + CentralAir + MSZoning + BsmtExposure, data = train)
##
```

```
## Residuals:
```

```
##      Min       1Q   Median       3Q      Max
## -114772  -9825   -1025    8753  144711
```

```
##
```

```
## Coefficients:
```

```
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept) -8.077e+05  9.435e+04 -8.561  < 2e-16 ***
## OverallQual  7.975e+03  8.568e+02  9.308  < 2e-16 ***
## GrLivArea    3.847e+01  5.125e+00  7.505 1.63e-13 ***
## YearBuilt    2.795e+02  4.184e+01  6.679 4.49e-11 ***
## BsmtFinSF1   2.228e+01  1.950e+00 11.424 < 2e-16 ***
## MSSubClass  -5.453e+01  2.195e+01 -2.485 0.013169 *
## KitchenQual  -5.708e+03  1.145e+03 -4.987 7.52e-07 ***
## OverallCond   3.870e+03  7.106e+02  5.447 6.82e-08 ***
## ExterQual    -9.682e+03  1.592e+03 -6.080 1.86e-09 ***
## TotalBsmtSF   2.341e+01  3.986e+00  5.874 6.23e-09 ***
```

```
## GarageArea      2.286e+01  4.139e+00   5.522 4.53e-08 ***
## Functional      3.992e+03  7.082e+02   5.637 2.40e-08 ***
## BsmtQual        -5.687e+03  9.926e+02  -5.730 1.42e-08 ***
## SaleCondition    2.090e+03  5.724e+02   3.651 0.000278 ***
## ScreenPorch     4.999e+01  1.437e+01   3.480 0.000529 ***
## FireplaceQu      1.299e+03  3.675e+02   3.534 0.000433 ***
## HeatingQC       -1.268e+03  4.467e+02  -2.839 0.004634 **
## LotArea          1.928e+00  4.357e-01   4.425 1.10e-05 ***
## KitchenAbvGr    -1.155e+04  3.491e+03  -3.309 0.000978 ***
## Street           5.293e+04  1.390e+04   3.808 0.000151 ***
## BedroomAbvGr    -4.665e+03  1.303e+03  -3.581 0.000363 ***
## MasVnrType       2.480e+03  1.068e+03   2.323 0.020418 *
## BsmtCond         1.842e+03  9.134e+02   2.017 0.044018 *
## TotRmsAbvGrd    2.412e+03  9.293e+02   2.596 0.009610 **
## BsmtFinSF2       1.014e+01  4.753e+00   2.134 0.033133 *
## Condition1       1.401e+03  8.091e+02   1.732 0.083716 .
## Exterior1st     -4.694e+02  2.049e+02  -2.291 0.022198 *
## YearRemodAdd     8.797e+01  4.543e+01   1.936 0.053191 .
## X2ndFlrSF        9.809e+00  4.304e+00   2.279 0.022919 *
## LandContour     -2.115e+03  9.194e+02  -2.300 0.021676 *
## CentralAir       5.824e+03  2.871e+03   2.028 0.042868 *
## MSZoning         -1.544e+03  9.136e+02  -1.690 0.091349 .
## BsmtExposure    -1.053e+03  6.288e+02  -1.675 0.094258 .
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 17820 on 802 degrees of freedom
## Multiple R-squared:  0.8967, Adjusted R-squared:  0.8926
## F-statistic: 217.6 on 32 and 802 DF,  p-value: < 2.2e-16
```

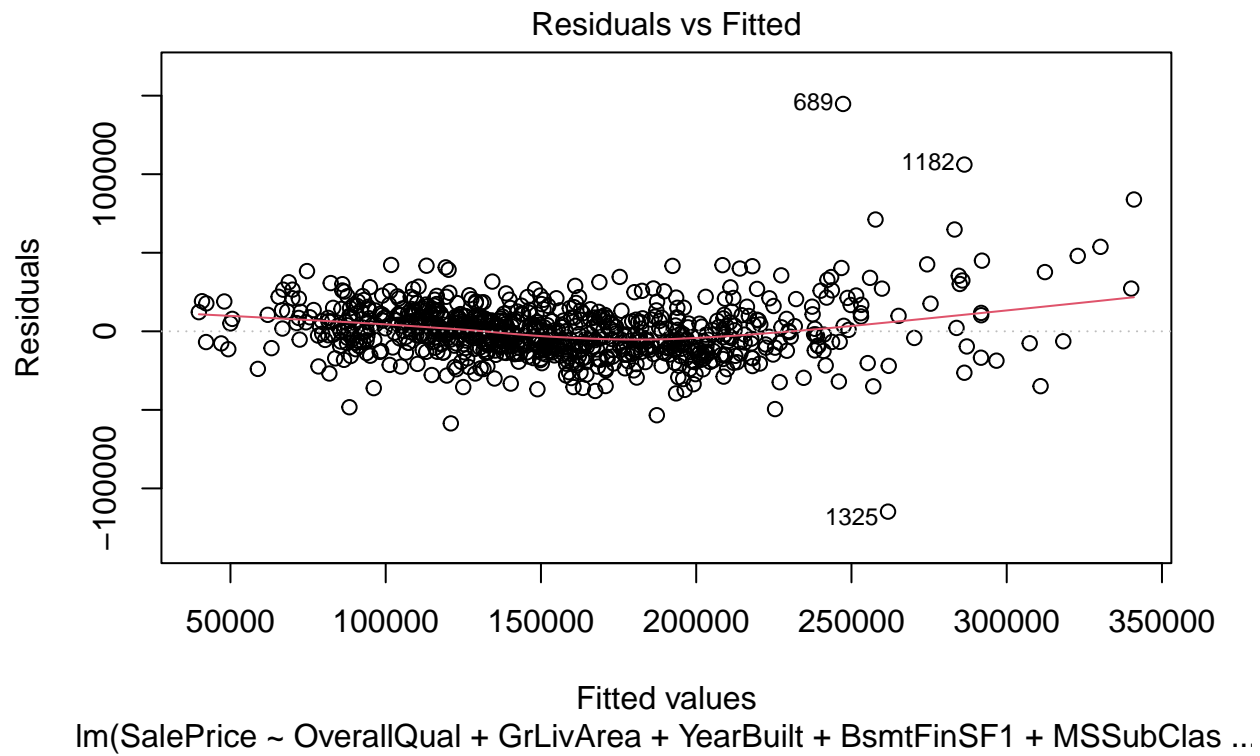
```
#test case prediction from step wise model
prediction <- as.data.frame(predict(step.model, test))
#renaming column to SalePrice
colnames(prediction) <- c( 'SalePrice')
#Create ID column
prediction$ID = test$ID
#printing out the predicted test case
write.csv(prediction, "D:/documents/MSDSStatFoundation/stepwise_output.csv", row.names = FALSE)

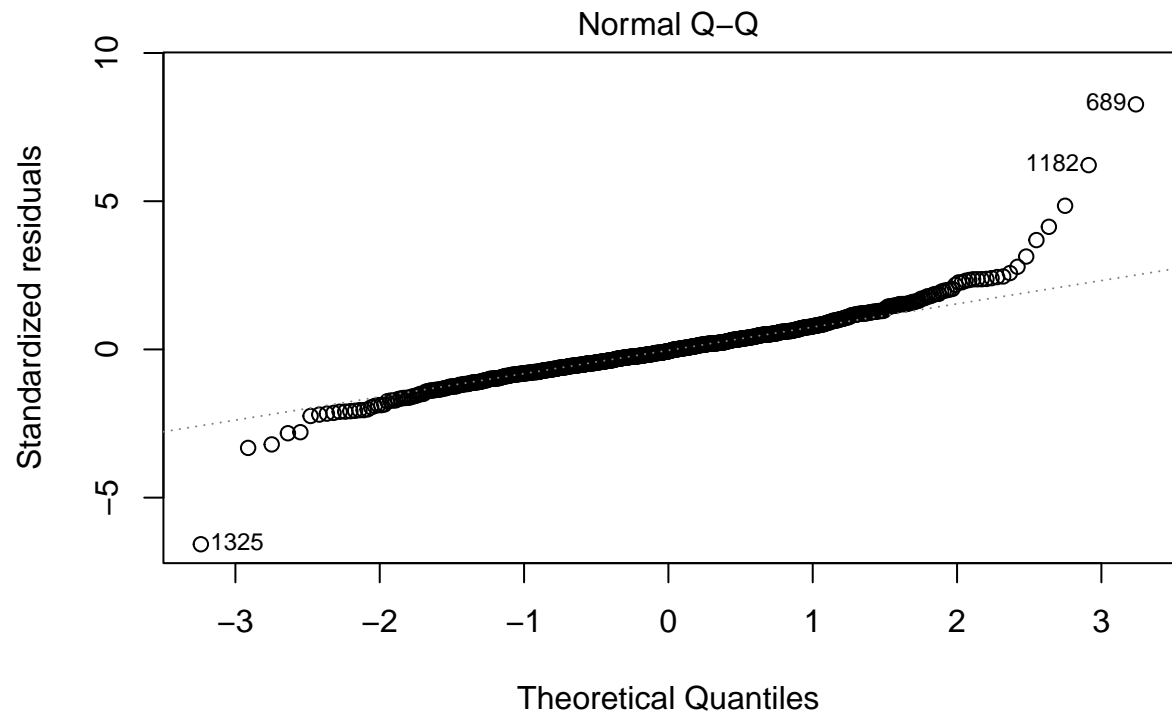
library(forecast)
```

```
## Warning: package 'forecast' was built under R version 4.2.3
```

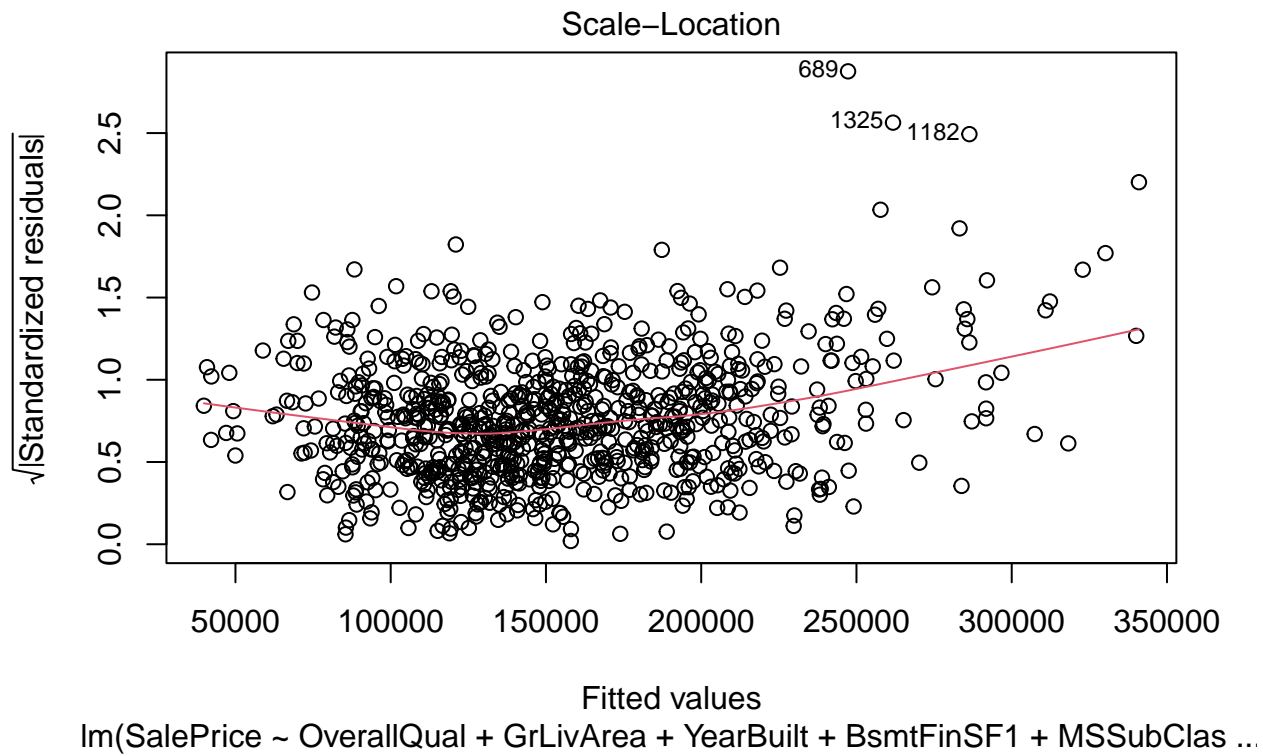
```
## Registered S3 method overwritten by 'quantmod':
##   method             from
##   as.zoo.data.frame zoo
```

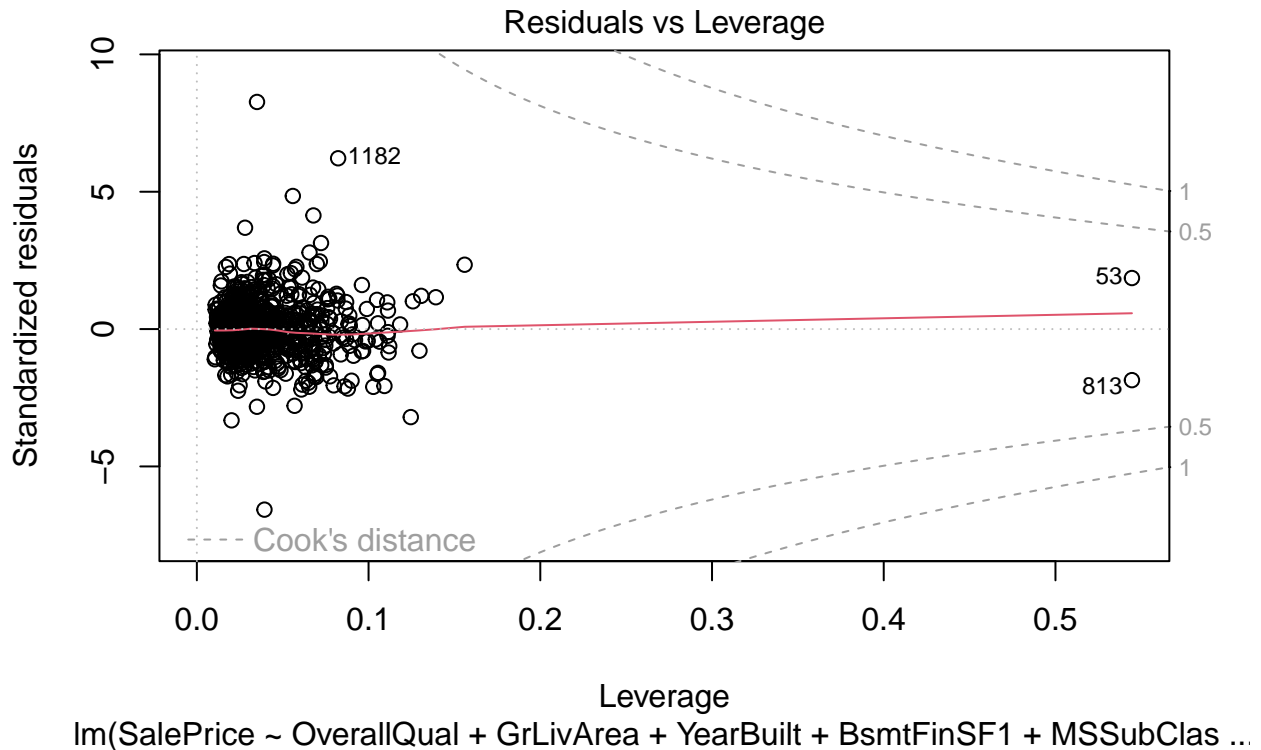
```
#plotting all the plots for assumptions
plot(step.model)
```





lm(SalePrice ~ OverallQual + GrLivArea + YearBuilt + BsmtFinSF1 + MSSubClas ...





```
#CV output with AIC, and Adj R2
CV(step.model)
```

```
##          CV          AIC          AICc          BIC          AdjR2
## 3.406920e+08 1.638026e+04 1.638324e+04 1.654100e+04 8.926142e-01
```

```
#Forward Regression
```

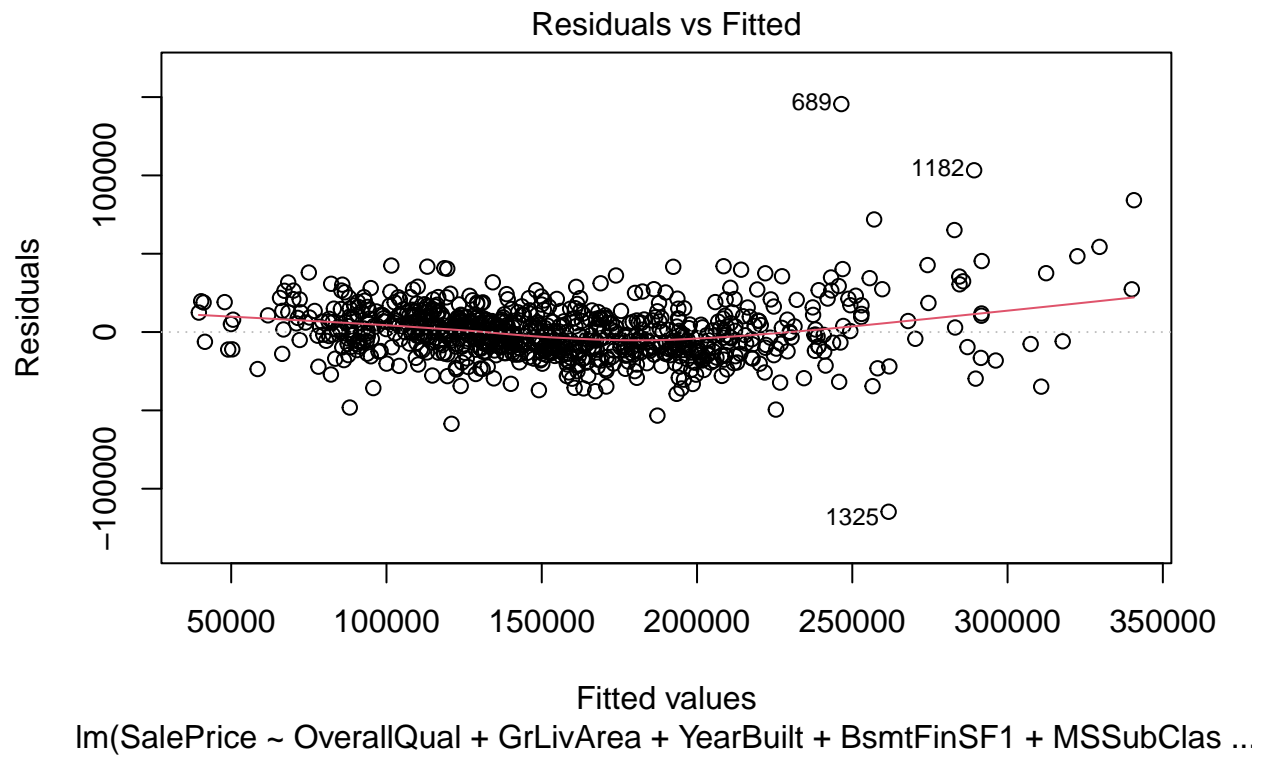
```
#stepwise regression model
forward.model <- stepAIC(inter.model, scope = list(upper = full.model, lower = inter.model), direction = "forward")
#summary of the model
summary(forward.model)
```

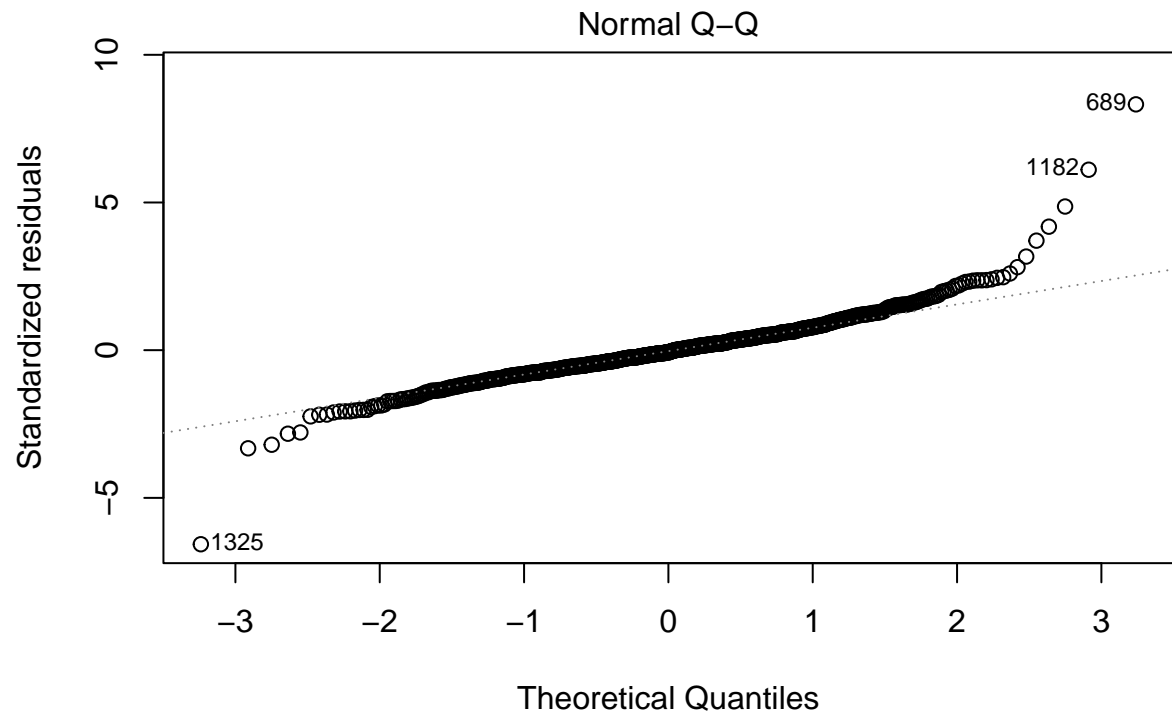
```
##
## Call:
## lm(formula = SalePrice ~ OverallQual + GrLivArea + YearBuilt +
##     BsmtFinSF1 + MSSubClass + KitchenQual + OverallCond + ExterQual +
##     TotalBsmtSF + GarageArea + Functional + BsmtQual + SaleCondition +
##     ScreenPorch + FireplaceQu + HeatingQC + LotArea + KitchenAbvGr +
##     Street + BedroomAbvGr + MasVnrType + BsmtCond + TotRmsAbvGrd +
##     BsmtFinSF2 + LandSlope + Condition1 + Exterior1st + YearRemodAdd +
##     X2ndFlrSF + LandContour + CentralAir + MSZoning + BsmtExposure,
##     data = train)
##
## Residuals:
```

```
##      Min      1Q  Median      3Q      Max
## -114701  -9835   -1251    8791  145528
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept) -8.213e+05  9.497e+04 -8.648 < 2e-16 ***
## OverallQual  8.081e+03  8.609e+02  9.387 < 2e-16 ***
## GrLivArea    3.788e+01  5.146e+00  7.362 4.51e-13 ***
## YearBuilt    2.806e+02  4.184e+01  6.707 3.76e-11 ***
## BsmtFinSF1   2.214e+01  1.953e+00 11.336 < 2e-16 ***
## MSSubClass  -5.342e+01  2.196e+01 -2.433 0.015194 *
## KitchenQual -5.719e+03  1.144e+03 -4.997 7.14e-07 ***
## OverallCond  3.864e+03  7.104e+02  5.439 7.13e-08 ***
## ExterQual    -9.634e+03  1.592e+03 -6.050 2.22e-09 ***
## TotalBsmtSF  2.330e+01  3.986e+00  5.845 7.36e-09 ***
## GarageArea   2.311e+01  4.143e+00  5.577 3.35e-08 ***
## Functional    4.001e+03  7.080e+02  5.651 2.22e-08 ***
## BsmtQual     -5.671e+03  9.923e+02 -5.715 1.55e-08 ***
## SaleCondition 2.143e+03  5.739e+02  3.734 0.000202 ***
## ScreenPorch  4.929e+01  1.437e+01  3.429 0.000636 ***
## FireplaceQu  1.286e+03  3.676e+02  3.498 0.000495 ***
## HeatingQC    -1.261e+03  4.466e+02 -2.823 0.004870 **
## LotArea       1.936e+00  4.356e-01  4.444 1.01e-05 ***
## KitchenAbvGr -1.138e+04  3.493e+03 -3.258 0.001167 **
## Street        5.603e+04  1.413e+04  3.966 7.95e-05 ***
## BedroomAbvGr -4.635e+03  1.303e+03 -3.558 0.000396 ***
## MasVnrType    2.416e+03  1.069e+03  2.261 0.024017 *
## BsmtCond      1.809e+03  9.135e+02  1.980 0.048074 *
## TotRmsAbvGrd  2.532e+03  9.341e+02  2.710 0.006866 **
## BsmtFinSF2    1.025e+01  4.752e+00  2.158 0.031255 *
## LandSlope     4.297e+03  3.514e+03  1.223 0.221746 .
## Condition1    1.396e+03  8.088e+02  1.726 0.084694 .
## Exterior1st  -4.546e+02  2.052e+02 -2.216 0.026969 *
## YearRemodAdd  8.695e+01  4.543e+01  1.914 0.055960 .
## X2ndFlrSF     9.796e+00  4.302e+00  2.277 0.023062 *
## LandContour   -1.743e+03  9.683e+02 -1.800 0.072310 .
## CentralAir    5.724e+03  2.872e+03  1.993 0.046581 *
## MSZoning      -1.536e+03  9.133e+02 -1.682 0.093051 .
## BsmtExposure  -9.830e+02  6.313e+02 -1.557 0.119824 .
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 17810 on 801 degrees of freedom
## Multiple R-squared:  0.8969, Adjusted R-squared:  0.8927
## F-statistic: 211.2 on 33 and 801 DF, p-value: < 2.2e-16
```

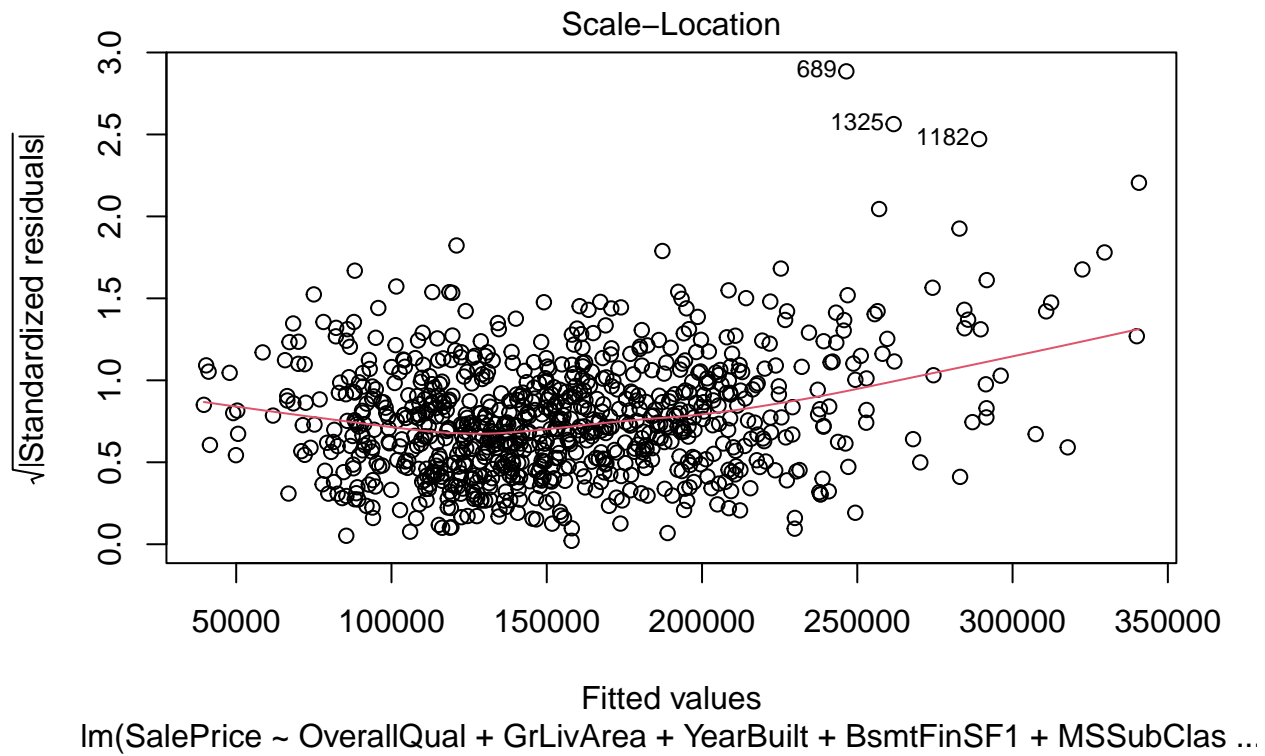
```
#test case prediction from step wise model
prediction <- as.data.frame(predict(forward.model, test))
#renaming column to SalePrice
colnames(prediction) <- c('SalePrice')
#Create ID column
prediction$ID = test$Id
#Printing out prediction
write.csv(prediction, "D:/documents/MSDStatFoundation/forward_output.csv", row.names = FALSE)
```

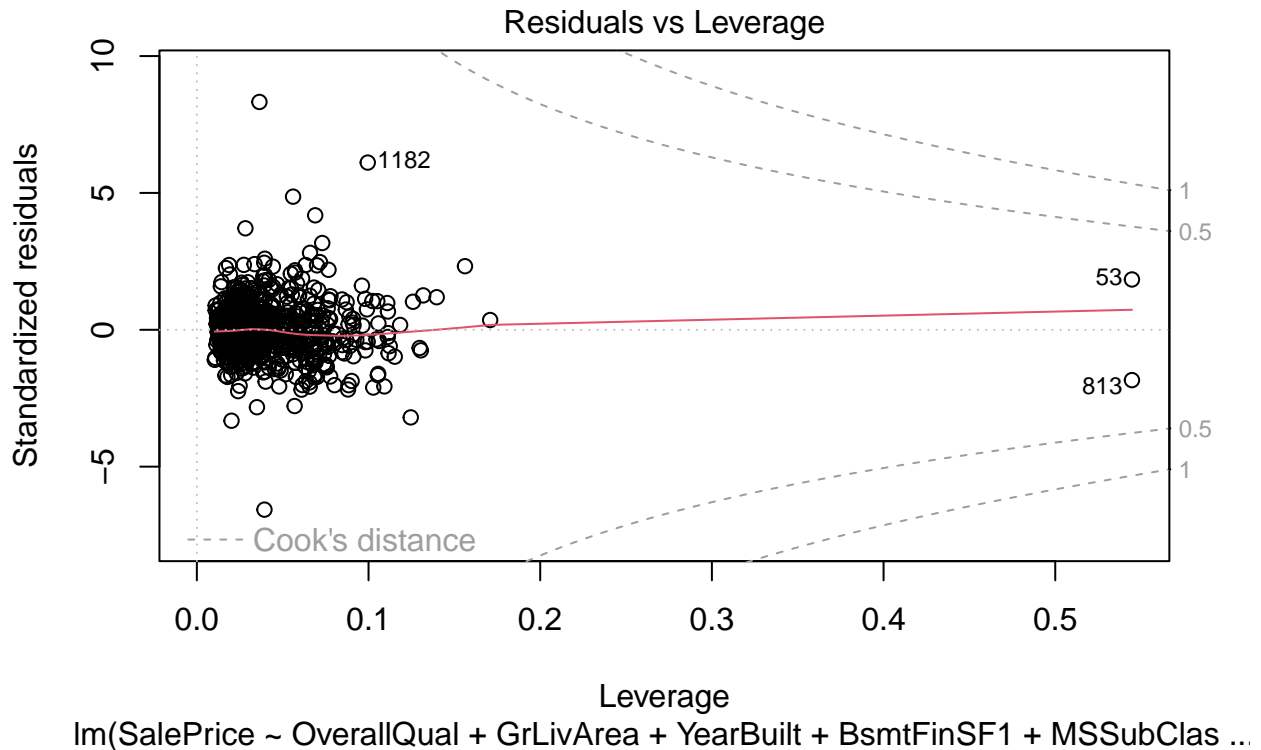
```
#Printing out model Assumption  
plot(forward.model)
```





lm(SalePrice ~ OverallQual + GrLivArea + YearBuilt + BsmtFinSF1 + MSSubClas ...





```
#Printing out the CV
CV(forward.model)
```

```
##           CV           AIC           AICc           BIC           AdjR2
## 3.413207e+08 1.638071e+04 1.638386e+04 1.654617e+04 8.926805e-01
```

```
#Backward Regression
```

```
#backward regression model
```

```
full.model<- lm(SalePrice~., data = train)
inter.model <- lm(SalePrice ~ 1, data = train)
backward.model <- stepAIC(full.model, scope = list(upper= full.model, lower = inter.model), direction =
#summary of the model
summary(backward.model)
```

```
##
## Call:
## lm(formula = SalePrice ~ MSSubClass + MSZoning + LotFrontage +
##   LotArea + Street + LandContour + Condition1 + OverallQual +
##   OverallCond + YearBuilt + YearRemodAdd + Exterior1st + Exterior2nd +
##   MasVnrType + ExterQual + BsmtQual + BsmtCond + BsmtExposure +
##   BsmtFinSF1 + BsmtFinSF2 + BsmtUnfSF + HeatingQC + CentralAir +
##   X1stFlrSF + X2ndFlrSF + BedroomAbvGr + KitchenAbvGr + KitchenQual +
##   TotRmsAbvGrd + Functional + FireplaceQu + GarageType + GarageYrBlt +
```

```

##      GarageArea + GarageCond + ScreenPorch + SaleCondition, data = train)
##
## Residuals:
##      Min        1Q    Median        3Q        Max
## -115354   -9700    -859      8796   145524
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept) -8.375e+05  9.928e+04 -8.435  < 2e-16 ***
## MSSubClass  -4.318e+01  2.217e+01 -1.947  0.051828 .
## MSZoning    -1.480e+03  9.171e+02 -1.614  0.106883
## LotFrontage  3.994e+01  2.675e+01  1.493  0.135809
## LotArea      1.858e+00  4.469e-01  4.156  3.58e-05 ***
## Street       5.629e+04  1.390e+04  4.048  5.66e-05 ***
## LandContour -2.055e+03  9.188e+02 -2.237  0.025578 *
## Condition1   1.563e+03  8.099e+02  1.929  0.054033 .
## OverallQual   7.938e+03  8.651e+02  9.176  < 2e-16 ***
## OverallCond   3.778e+03  7.104e+02  5.318  1.37e-07 ***
## YearBuilt     2.896e+02  4.403e+01  6.578  8.65e-11 ***
## YearRemodAdd  8.970e+01  4.565e+01  1.965  0.049776 *
## Exterior1st  -8.984e+02  3.788e+02 -2.372  0.017949 *
## Exterior2nd   4.837e+02  3.434e+02  1.409  0.159362
## MasVnrType     2.279e+03  1.073e+03  2.123  0.034063 *
## ExterQual    -1.010e+04  1.596e+03 -6.330  4.08e-10 ***
## BsmtQual     -5.439e+03  1.001e+03 -5.432  7.41e-08 ***
## BsmtCond      1.646e+03  9.154e+02  1.798  0.072566 .
## BsmtExposure -8.960e+02  6.303e+02 -1.422  0.155534
## BsmtFinSF1    4.567e+01  4.177e+00 10.933  < 2e-16 ***
## BsmtFinSF2    3.385e+01  5.982e+00  5.659  2.13e-08 ***
## BsmtUnfSF     2.309e+01  4.078e+00  5.662  2.09e-08 ***
## HeatingQC    -1.263e+03  4.488e+02 -2.814  0.005021 **
## CentralAir    5.264e+03  2.914e+03  1.807  0.071182 .
## X1stFlrSF     3.945e+01  5.353e+00  7.370  4.28e-13 ***
## X2ndFlrSF     4.766e+01  3.501e+00 13.613  < 2e-16 ***
## BedroomAbvGr -4.547e+03  1.300e+03 -3.498  0.000495 ***
## KitchenAbvGr -1.428e+04  3.554e+03 -4.017  6.45e-05 ***
## KitchenQual  -5.543e+03  1.149e+03 -4.826  1.67e-06 ***
## TotRmsAbvGrd  2.531e+03  9.231e+02  2.742  0.006243 **
## Functional    4.292e+03  7.131e+02  6.018  2.69e-09 ***
## FireplaceQu   1.372e+03  3.716e+02  3.692  0.000237 ***
## GarageType    7.293e+02  4.314e+02  1.691  0.091286 .
## GarageYrBlt   -7.894e+00  3.575e+00 -2.208  0.027507 *
## GarageArea    2.455e+01  5.161e+00  4.756  2.34e-06 ***
## GarageCond    1.902e+03  1.237e+03  1.537  0.124654
## ScreenPorch   4.881e+01  1.437e+01  3.397  0.000716 ***
## SaleCondition 2.082e+03  5.716e+02  3.643  0.000287 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 17780 on 797 degrees of freedom
## Multiple R-squared:  0.8979, Adjusted R-squared:  0.8931
## F-statistic: 189.4 on 37 and 797 DF,  p-value: < 2.2e-16

```



```

#test case prediction from backward model
prediction <- as.data.frame(predict(backward.model, test))
#renaming column to SalePrice
colnames(prediction) <- c( 'SalePrice')
#prediction$SalePrice <- 10^(prediction$SalePrice)
#Create ID column
prediction$ID = test$Id
#Printing out Prediction
write.csv(prediction, "D:/documents/MSDSStatFoundation/custom_output.csv", row.names = FALSE)
#Printing out the CV score
CV(backward.model)

```

```

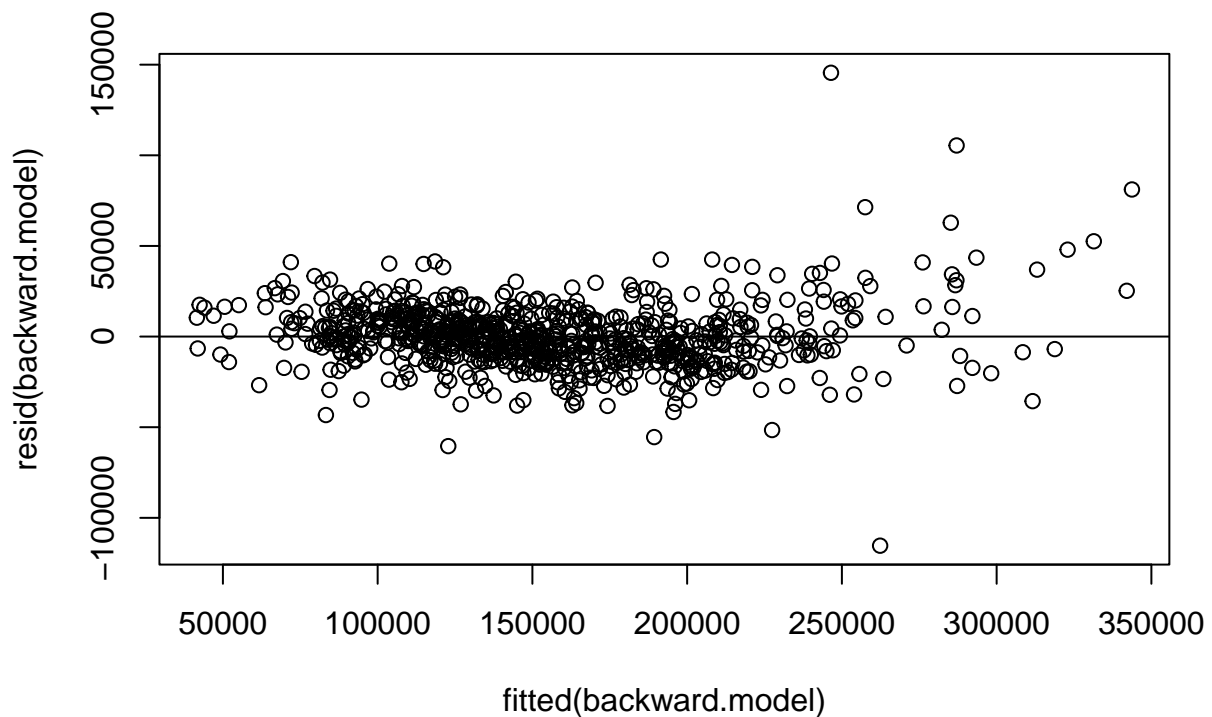
##          CV          AIC          AICc          BIC          AdjR2
## 3.396139e+08 1.638105e+04 1.638498e+04 1.656542e+04 8.931261e-01

```

```

#Plotting the residual model
plot(fitted(backward.model), resid(backward.model))
abline(0, 0)

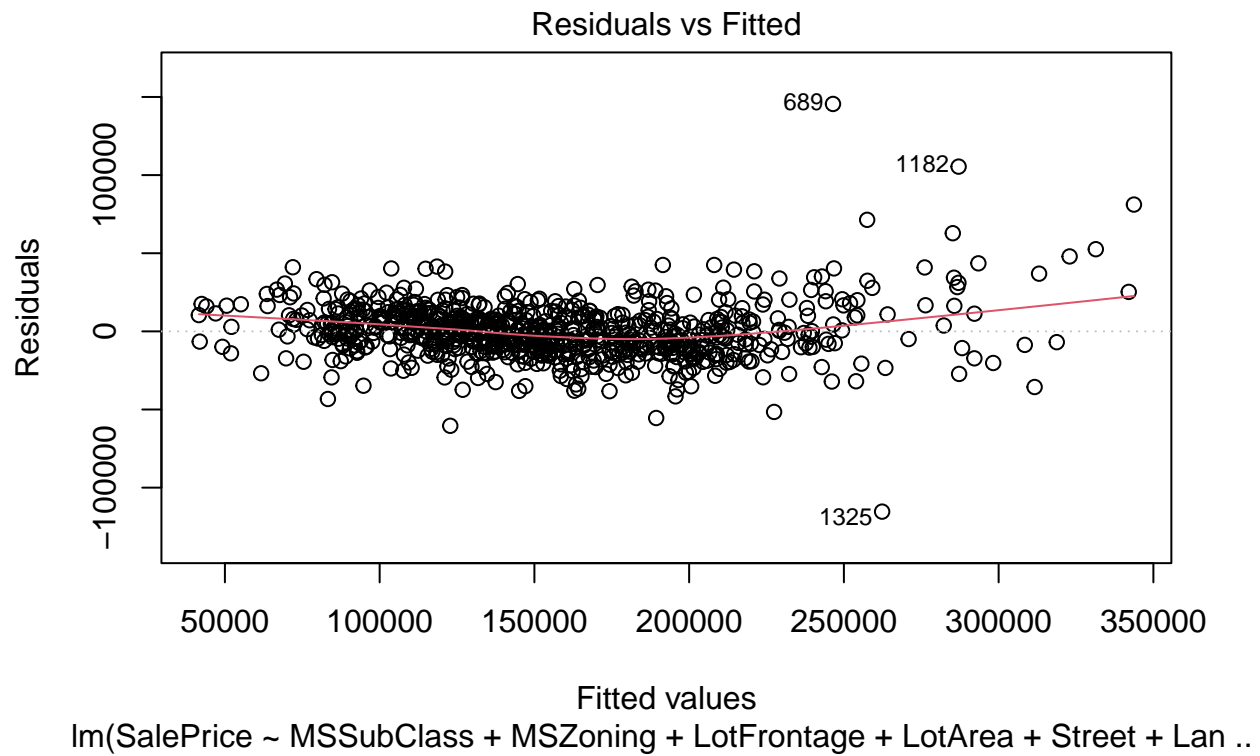
```

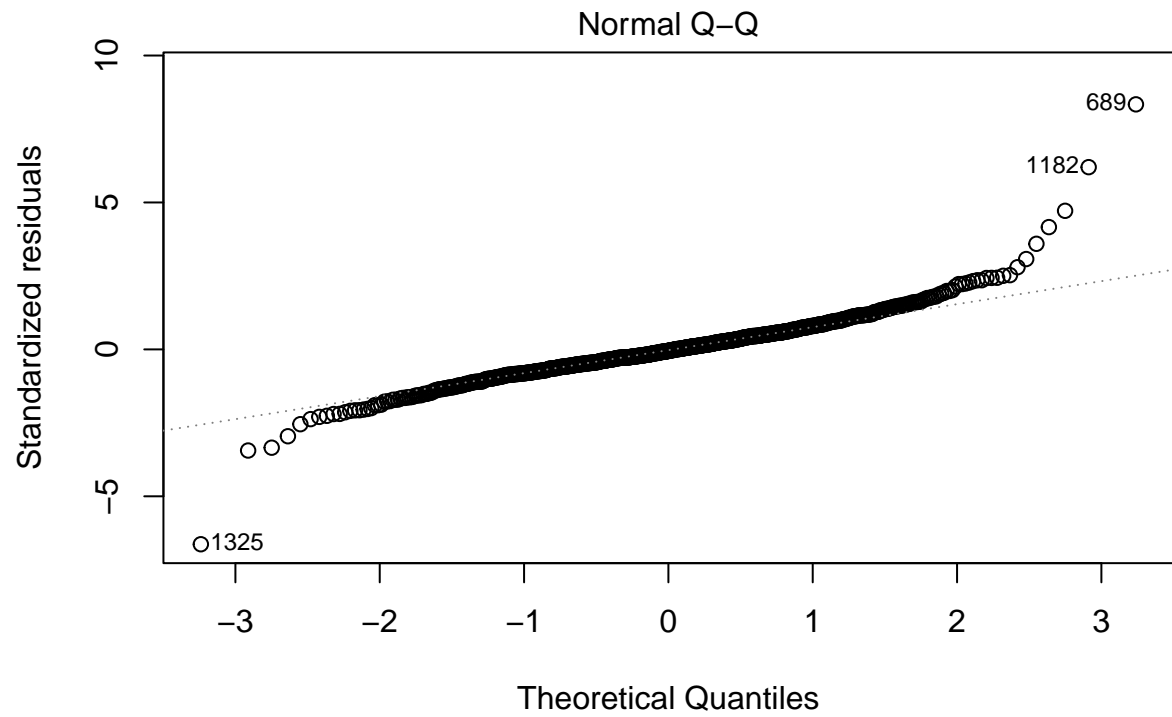


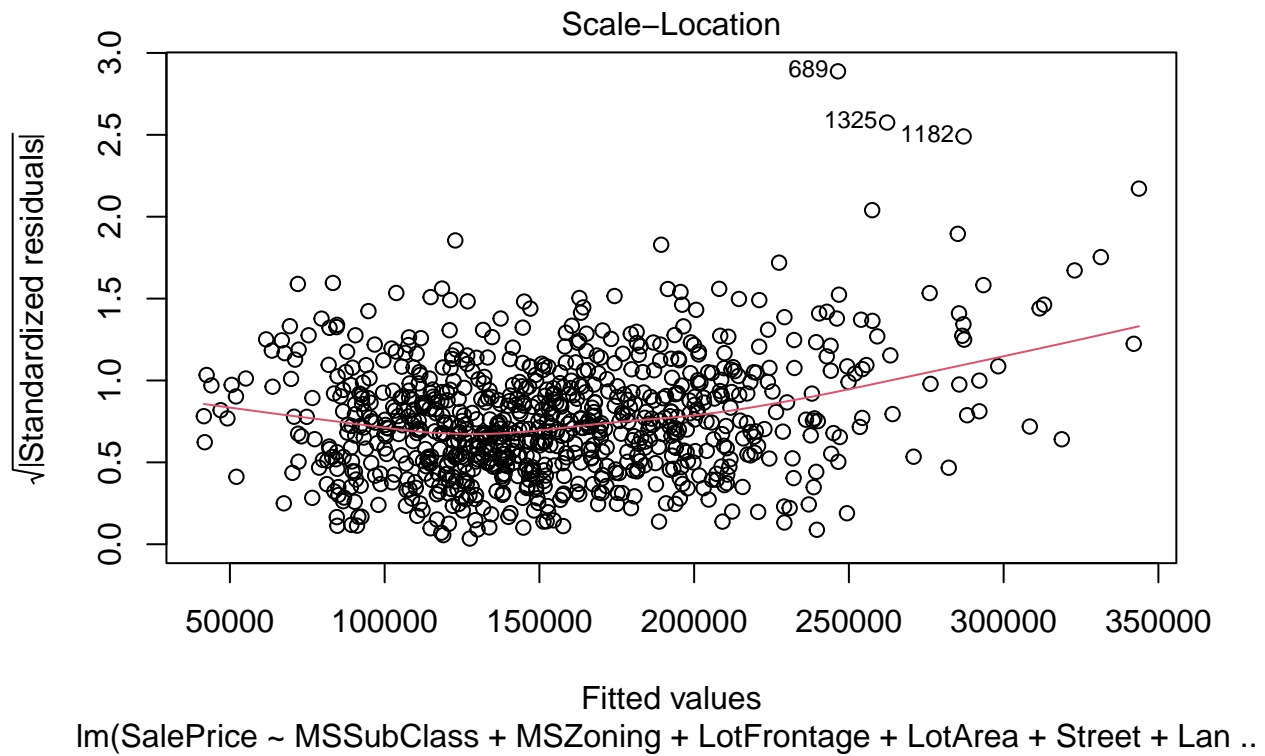
```

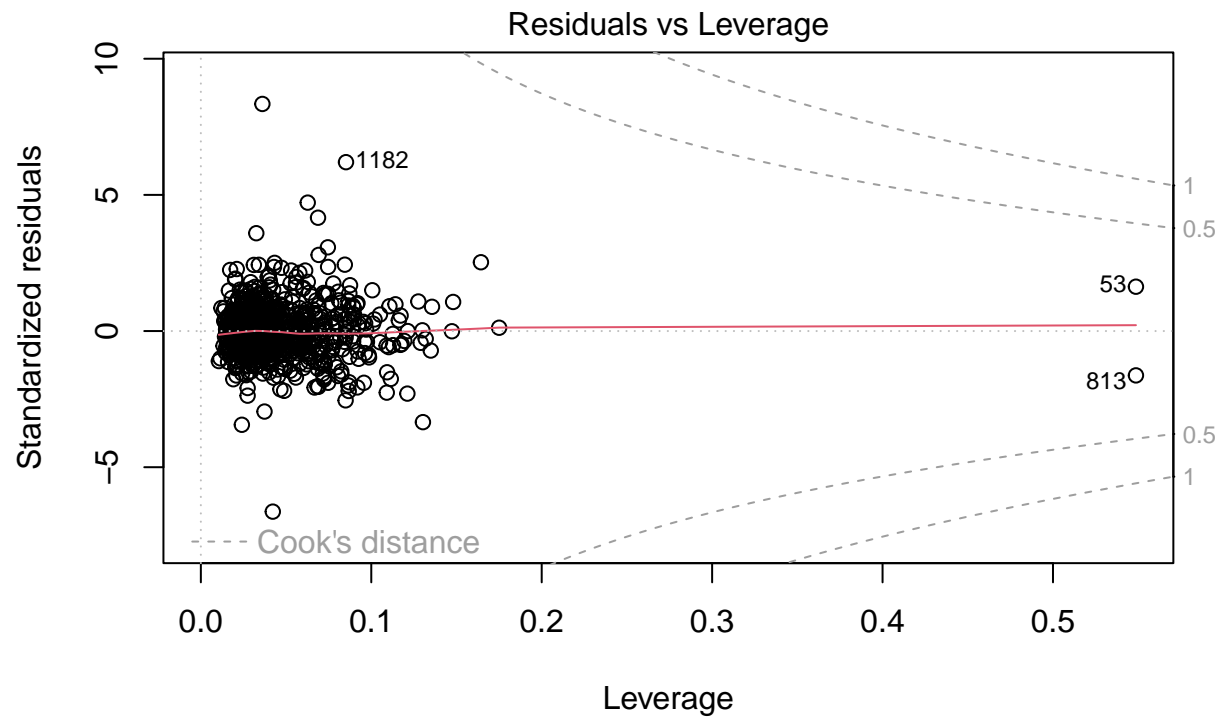
#qq plot of the regression and CooksD
plot(backward.model)

```





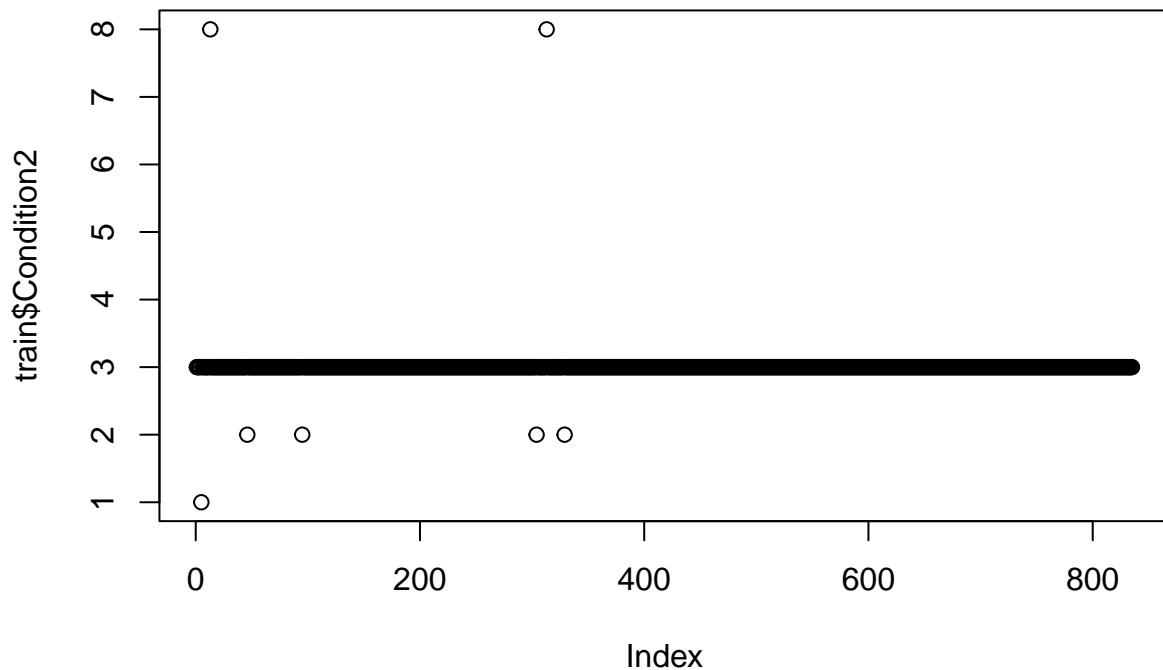




lm(SalePrice ~ MSSubClass + MSZoning + LotFrontage + LotArea + Street + Lan ..

#Custom Regression

```
#stepwise regression model
plot(train$Condition2)
```



```
temp.model <- lm(formula = SalePrice ~ OverallQual + GrLivArea +
  ExterQual + GarageCars + MSSubClass +
  KitchenQual + YearBuilt + OverallCond + LotArea +
  BsmtQual + TotalBsmtSF +
  MasVnrArea + Fireplaces + SaleCondition + RoofMatl +
  Functional + MasVnrType + WoodDeckSF + ScreenPorch +
  BsmtFullBath + BsmtCond + BsmtExposure + KitchenAbvGr +
  TotRmsAbvGrd + BedroomAbvGr + Street + GarageYrBlt +
  LowQualFinSF + Exterior1st, data = train)
#Full model with interactions
full.model<- lm(SalePrice~., data = train)
#model with only intercepts
inter.model <- lm(SalePrice ~ 1, data = train)
#custom model with stepwise
custom.model <- stepAIC(temp.model, scope = list(upper= temp.model, lower = inter.model), direction = "both")
#summary of the model
summary(custom.model)
```

```
##
## Call:
## lm(formula = SalePrice ~ OverallQual + GrLivArea + ExterQual +
##   GarageCars + MSSubClass + KitchenQual + YearBuilt + OverallCond +
##   LotArea + BsmtQual + TotalBsmtSF + MasVnrArea + Fireplaces +
##   SaleCondition + Functional + MasVnrType + ScreenPorch + BsmtFullBath +
##   BsmtCond + KitchenAbvGr + TotRmsAbvGrd + BedroomAbvGr + Street +
```

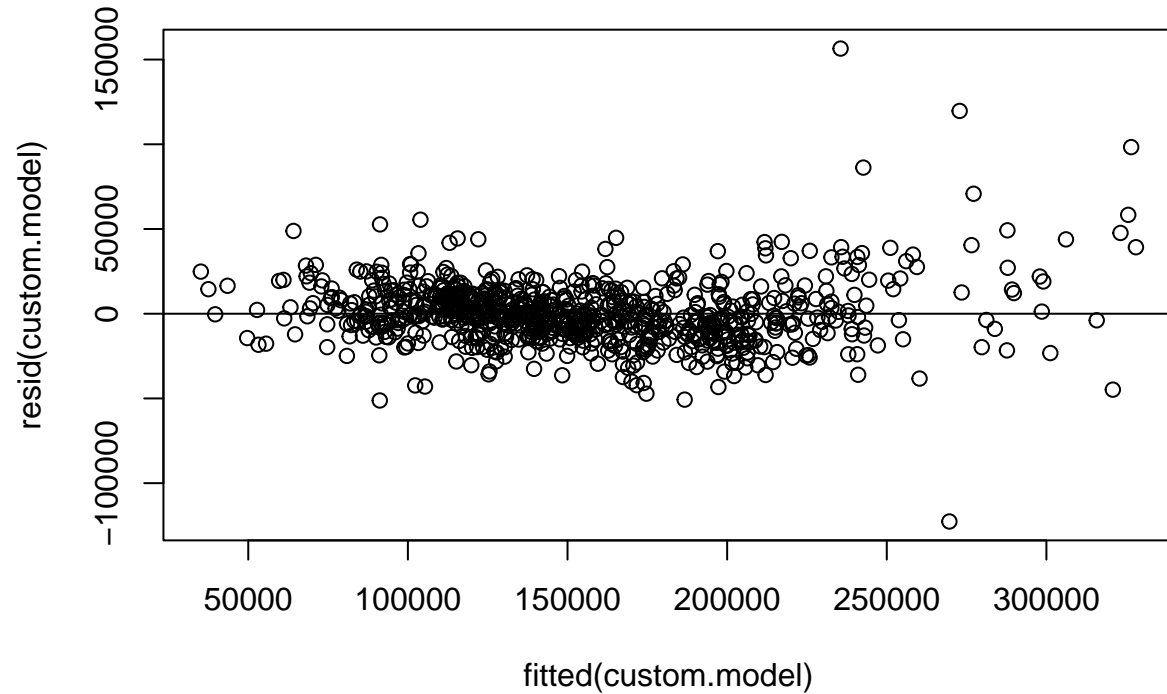
```
##      LowQualFinSF + Exterior1st, data = train)
##
## Residuals:
##      Min        1Q    Median        3Q        Max
## -122606  -10957   -1386    9476   156473
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept) -9.241e+05  7.512e+04 -12.301 < 2e-16 ***
## OverallQual   7.864e+03  9.187e+02  8.559 < 2e-16 ***
## GrLivArea     5.205e+01  3.639e+00 14.304 < 2e-16 ***
## ExterQual    -9.602e+03  1.666e+03 -5.764 1.17e-08 ***
## GarageCars     4.766e+03  1.239e+03  3.847 0.000129 ***
## MSSubClass   -4.791e+01  2.251e+01 -2.129 0.033564 *
## KitchenQual  -5.768e+03  1.187e+03 -4.859 1.41e-06 ***
## YearBuilt     4.165e+02  3.622e+01 11.497 < 2e-16 ***
## OverallCond    5.639e+03  6.579e+02  8.571 < 2e-16 ***
## LotArea       2.267e+00  4.507e-01  5.030 6.04e-07 ***
## BsmtQual     -5.243e+03  9.927e+02 -5.282 1.65e-07 ***
## TotalBsmtSF   2.228e+01  2.730e+00  8.160 1.28e-15 ***
## MasVnrArea    1.064e+01  5.366e+00  1.983 0.047659 *
## Fireplaces    2.798e+03  1.315e+03  2.128 0.033649 *
## SaleCondition 1.840e+03  6.033e+02  3.050 0.002360 **
## Functional    4.160e+03  7.383e+02  5.634 2.43e-08 ***
## MasVnrType    3.634e+03  1.227e+03  2.961 0.003158 **
## ScreenPorch   5.575e+01  1.537e+01  3.627 0.000305 ***
## BsmtFullBath  1.012e+04  1.409e+03  7.177 1.61e-12 ***
## BsmtCond      2.212e+03  9.290e+02  2.381 0.017475 *
## KitchenAbvGr -1.523e+04  3.644e+03 -4.180 3.23e-05 ***
## TotRmsAbvGrd  1.735e+03  9.774e+02  1.775 0.076257 .
## BedroomAbvGr -5.459e+03  1.374e+03 -3.974 7.71e-05 ***
## Street        5.267e+04  1.394e+04  3.778 0.000170 ***
## LowQualFinSF  -2.731e+01  1.597e+01 -1.710 0.087619 .
## Exterior1st  -4.516e+02  2.112e+02 -2.138 0.032790 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 19020 on 809 degrees of freedom
## Multiple R-squared:  0.8813, Adjusted R-squared:  0.8776
## F-statistic: 240.2 on 25 and 809 DF, p-value: < 2.2e-16

#test case prediction from step wise model
prediction <- as.data.frame(predict(custom.model, test))
#renaming column to SalePrice
colnames(prediction) <- c('SalePrice')
#prediction$SalePrice <- 10^(prediction$SalePrice)
#Create ID column
prediction$ID = test$ID
#Print out of predictions
write.csv(prediction, "D:/documents/MSDStatFoundation/custom_output.csv", row.names = FALSE)
#CV Score
CV(custom.model)
```

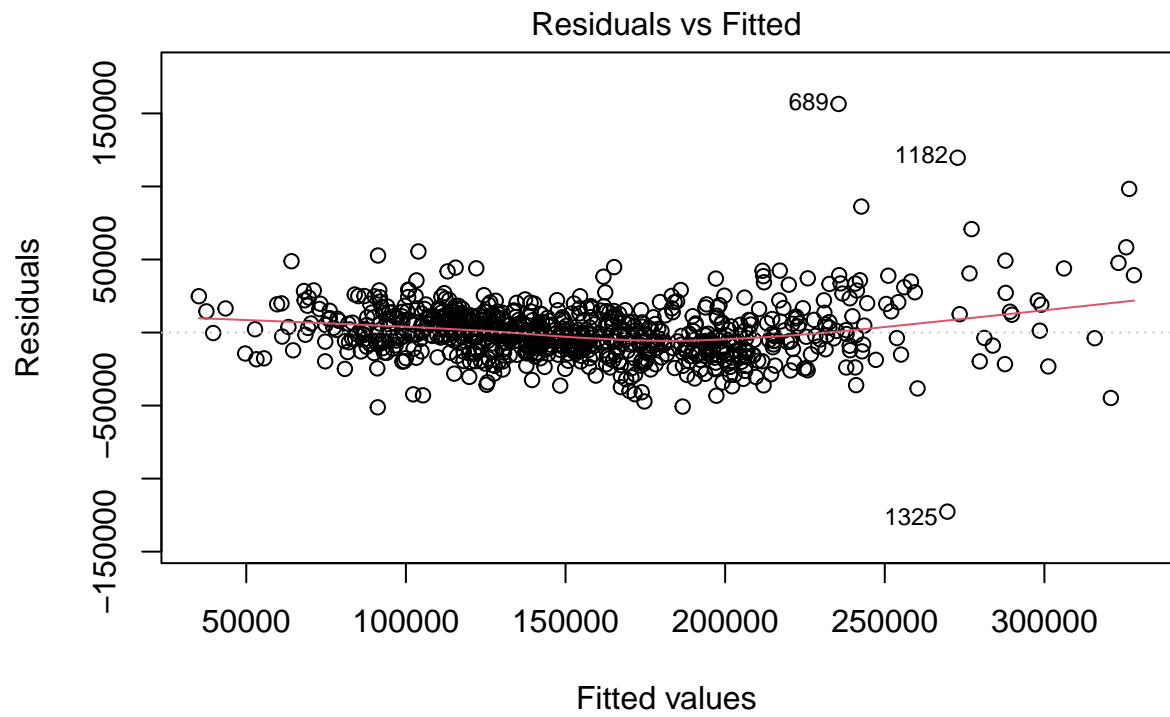
```
##          CV          AIC          AICc          BIC          AdjR2
```

```
## 3.822583e+08 1.648291e+04 1.648478e+04 1.661055e+04 8.775832e-01
```

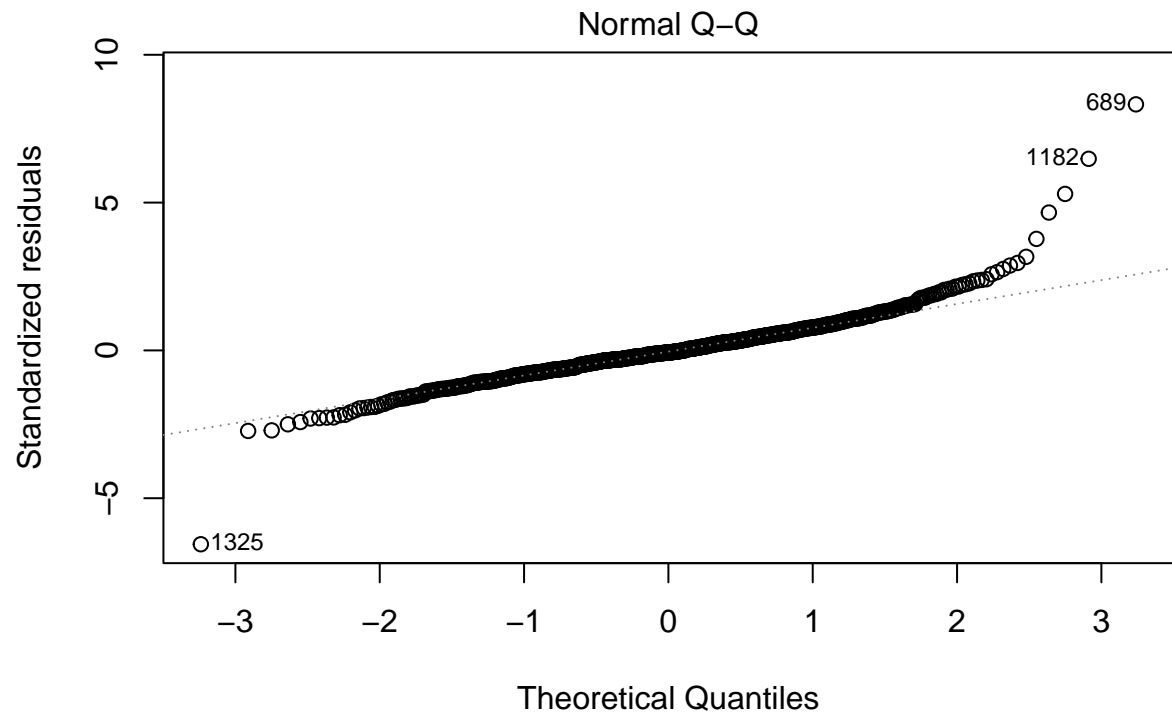
```
#residual plot  
plot(fitted(custom.model), resid(custom.model))  
abline(0, 0)
```

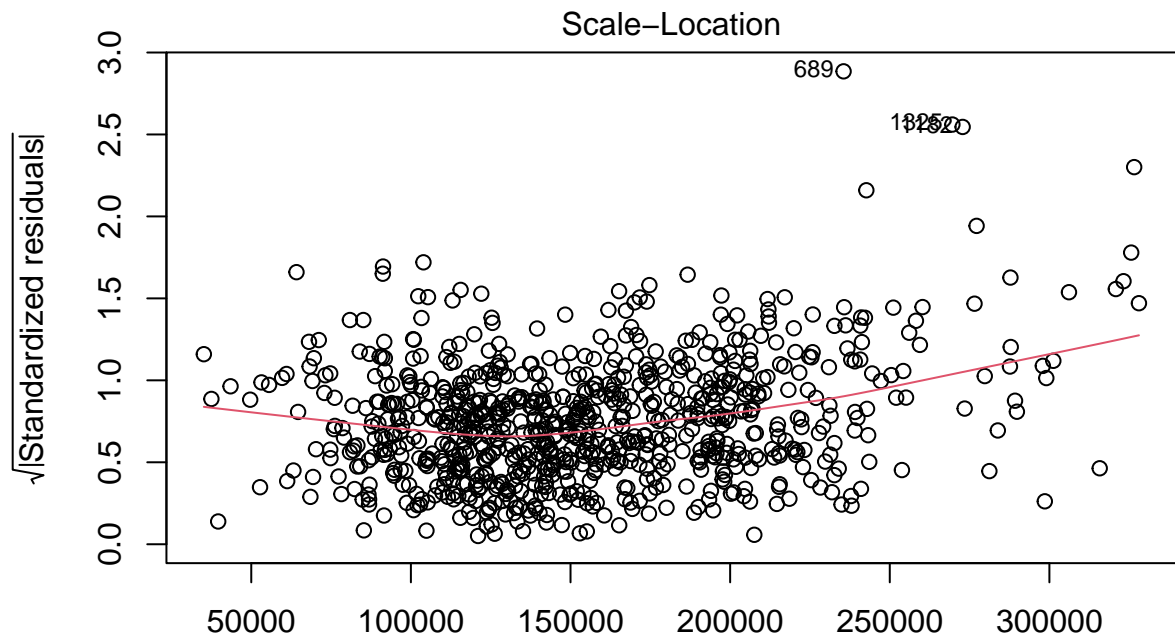


```
#Plot of residuals and Cooks D  
plot(custom.model)
```

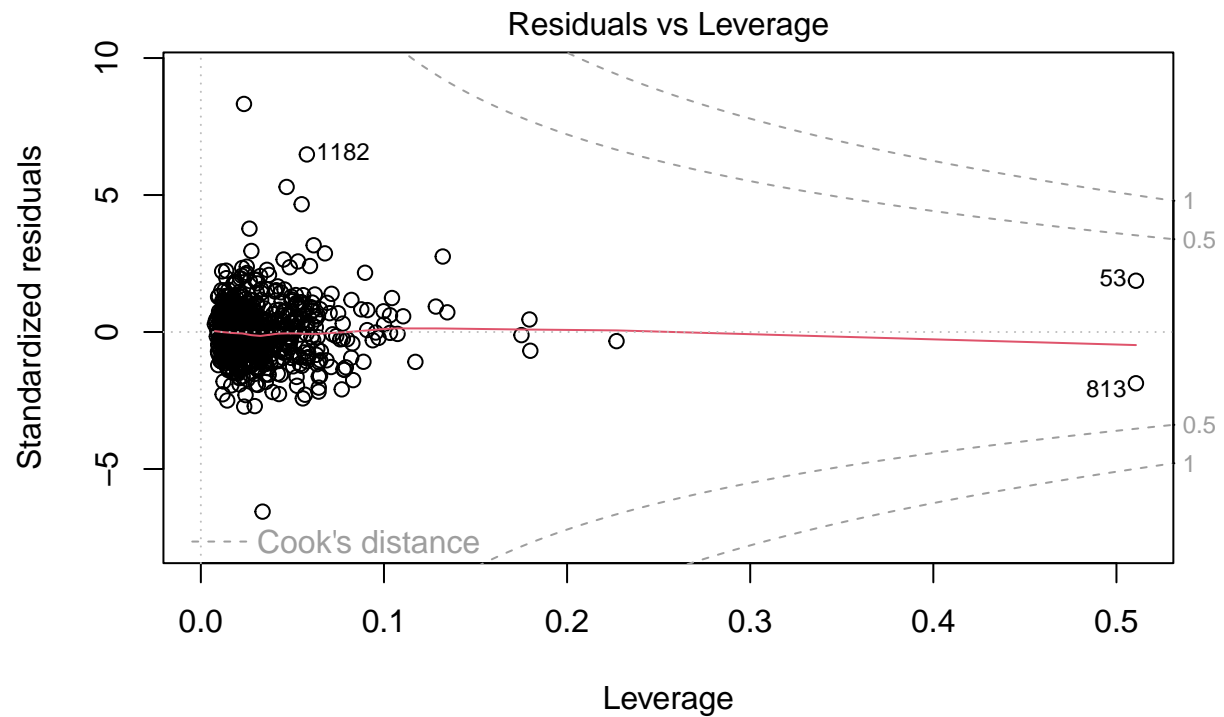
lm(SalePrice ~ OverallQual + GrLivArea + ExterQual + GarageCars + MSSubClas ..





Fitted values

lm(SalePrice ~ OverallQual + GrLivArea + ExterQual + GarageCars + MSSubClas ..



lm(SalePrice ~ OverallQual + GrLivArea + ExterQual + GarageCars + MSSubClas ..