

Visualización de datos

Gráficas con ggplot

Agosto 2017

```
data <- read.csv("data/train.csv", header=T, dec=".", sep=",")
head(data)
```

##	Id	MSSubClass	MSZoning	LotFrontage	LotArea	Street	Alley	LotShape
## 1	1	60	RL	65	8450	Pave	<NA>	Reg
## 2	2	20	RL	80	9600	Pave	<NA>	Reg
## 3	3	60	RL	68	11250	Pave	<NA>	IR1
## 4	4	70	RL	60	9550	Pave	<NA>	IR1
## 5	5	60	RL	84	14260	Pave	<NA>	IR1
## 6	6	50	RL	85	14115	Pave	<NA>	IR1
##	LandContour	Utilities	LotConfig	LandSlope	Neighborhood	Condition1		
## 1	Lvl	AllPub	Inside	Gtl	CollgCr	Norm		
## 2	Lvl	AllPub	FR2	Gtl	Veenker	Feedr		
## 3	Lvl	AllPub	Inside	Gtl	CollgCr	Norm		
## 4	Lvl	AllPub	Corner	Gtl	Crawfor	Norm		
## 5	Lvl	AllPub	FR2	Gtl	NoRidge	Norm		
## 6	Lvl	AllPub	Inside	Gtl	Mitchel	Norm		
##	Condition2	BldgType	HouseStyle	OverallQual	OverallCond	YearBuilt		
## 1	Norm	1Fam	2Story	7	5	2003		
## 2	Norm	1Fam	1Story	6	8	1976		
## 3	Norm	1Fam	2Story	7	5	2001		
## 4	Norm	1Fam	2Story	7	5	1915		
## 5	Norm	1Fam	2Story	8	5	2000		
## 6	Norm	1Fam	1.5Fin	5	5	1993		
##	YearRemodAdd	RoofStyle	RoofMatl	Exterior1st	Exterior2nd	MasVnrType		
## 1	2003	Gable	CompShg	VinylSd	VinylSd	BrkFace		
## 2	1976	Gable	CompShg	MetalSd	MetalSd	None		
## 3	2002	Gable	CompShg	VinylSd	VinylSd	BrkFace		
## 4	1970	Gable	CompShg	Wd Sdng	Wd Shng	None		
## 5	2000	Gable	CompShg	VinylSd	VinylSd	BrkFace		
## 6	1995	Gable	CompShg	VinylSd	VinylSd	None		
##	MasVnrArea	ExterQual	ExterCond	Foundation	BsmtQual	BsmtCond	BsmtExposure	
## 1	196	Gd	TA	PConc	Gd	TA	No	
## 2	0	TA	TA	CBlock	Gd	TA	Gd	
## 3	162	Gd	TA	PConc	Gd	TA	Mn	
## 4	0	TA	TA	BrkTil	TA	Gd	No	
## 5	350	Gd	TA	PConc	Gd	TA	Av	
## 6	0	TA	TA	Wood	Gd	TA	No	
##	BsmtFinType1	BsmtFinSF1	BsmtFinType2	BsmtFinSF2	BsmtUnfSF	TotalBsmtSF		
## 1	GLQ	706	Unf	0	150	856		
## 2	ALQ	978	Unf	0	284	1262		
## 3	GLQ	486	Unf	0	434	920		
## 4	ALQ	216	Unf	0	540	756		
## 5	GLQ	655	Unf	0	490	1145		
## 6	GLQ	732	Unf	0	64	796		
##	Heating	HeatingQC	CentralAir	Electrical	X1stFlrSF	X2ndFlrSF	LowQualFinSF	
## 1	GasA	Ex	Y	SBrkr	856	854	0	

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## 2    GasA      Ex      Y      SBrkr      1262      0      0
## 3    GasA      Ex      Y      SBrkr      920      866     0
## 4    GasA      Gd      Y      SBrkr      961      756     0
## 5    GasA      Ex      Y      SBrkr      1145     1053     0
## 6    GasA      Ex      Y      SBrkr      796      566     0
##      GrLivArea BsmtFullBath BsmtHalfBath FullBath HalfBath BedroomAbvGr
## 1      1710          1          0          2          1          3
## 2      1262          0          1          2          0          3
## 3      1786          1          0          2          1          3
## 4      1717          1          0          1          0          3
## 5      2198          1          0          2          1          4
## 6      1362          1          0          1          1          1
##      KitchenAbvGr KitchenQual TotRmsAbvGrd Functional Fireplaces FireplaceQu
## 1          1          Gd          8          Typ          0      <NA>
## 2          1          TA          6          Typ          1          TA
## 3          1          Gd          6          Typ          1          TA
## 4          1          Gd          7          Typ          1          Gd
## 5          1          Gd          9          Typ          1          TA
## 6          1          TA          5          Typ          0      <NA>
##      GarageType GarageYrBlt GarageFinish GarageCars GarageArea GarageQual
## 1      Attchd      2003          RFn          2          548          TA
## 2      Attchd      1976          RFn          2          460          TA
## 3      Attchd      2001          RFn          2          608          TA
## 4      Detchd      1998          Unf          3          642          TA
## 5      Attchd      2000          RFn          3          836          TA
## 6      Attchd      1993          Unf          2          480          TA
##      GarageCond PavedDrive WoodDeckSF OpenPorchSF EnclosedPorch X3SsnPorch
## 1          TA          Y          0          61          0          0
## 2          TA          Y          298          0          0          0
## 3          TA          Y          0          42          0          0
## 4          TA          Y          0          35          272          0
## 5          TA          Y          192          84          0          0
## 6          TA          Y          40          30          0          320
##      ScreenPorch PoolArea PoolQC Fence MiscFeature MiscVal MoSold YrSold
## 1          0          0 <NA> <NA>          <NA>          0          2  2008
## 2          0          0 <NA> <NA>          <NA>          0          5  2007
## 3          0          0 <NA> <NA>          <NA>          0          9  2008
## 4          0          0 <NA> <NA>          <NA>          0          2  2006
## 5          0          0 <NA> <NA>          <NA>          0         12  2008
## 6          0          0 <NA> MnPrv          Shed          700         10  2009
##      SaleType SaleCondition SalePrice
## 1          WD          Normal    208500
## 2          WD          Normal    181500
## 3          WD          Normal    223500
## 4          WD          Abnorml    140000
## 5          WD          Normal    250000
## 6          WD          Normal    143000

```

```
summary(data)
```

```

##      Id      MSSubClass      MSZoning      LotFrontage
## Min.   : 1.0    Min.    : 20.0    C (all): 10    Min.    : 21.00
## 1st Qu.: 365.8  1st Qu.: 20.0    FV      : 65    1st Qu.: 59.00
## Median : 730.5  Median : 50.0    RH      : 16    Median : 69.00
## Mean   : 730.5  Mean    : 56.9    RL      :1151    Mean   : 70.05

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## 3rd Qu.:1095.2 3rd Qu.: 70.0 RM : 218 3rd Qu.: 80.00
## Max. :1460.0 Max. :190.0 Max. :313.00
## NA's :259
## LotArea Street Alley LotShape LandContour
## Min. : 1300 Grvl: 6 Grvl: 50 IR1:484 Bnk: 63
## 1st Qu.: 7554 Pave:1454 Pave: 41 IR2: 41 HLS: 50
## Median : 9478 NA's:1369 IR3: 10 Low: 36
## Mean : 10517 Reg:925 Lvl:1311
## 3rd Qu.: 11602
## Max. :215245
##
## Utilities LotConfig LandSlope Neighborhood Condition1
## AllPub:1459 Corner : 263 Gtl:1382 NAmes :225 Norm :1260
## NoSeWa: 1 CulDSac: 94 Mod: 65 CollgCr:150 Feedr : 81
## FR2 : 47 Sev: 13 OldTown:113 Artery : 48
## FR3 : 4 Edwards:100 RRAn : 26
## Inside :1052 Somerst: 86 PosN : 19
## Gilbert: 79 RRAe : 11
## (Other):707 (Other): 15
## Condition2 BldgType HouseStyle OverallQual
## Norm :1445 1Fam :1220 1Story :726 Min. : 1.000
## Feedr : 6 2fmCon: 31 2Story :445 1st Qu.: 5.000
## Artery : 2 Duplex: 52 1.5Fin :154 Median : 6.000
## PosN : 2 Twnhs : 43 SLvl : 65 Mean : 6.099
## RRNn : 2 TwnhsE: 114 SFoyer : 37 3rd Qu.: 7.000
## PosA : 1 1.5Unf : 14 Max. :10.000
## (Other): 2 (Other): 19
## OverallCond YearBuilt YearRemodAdd RoofStyle
## Min. :1.000 Min. :1872 Min. :1950 Flat : 13
## 1st Qu.:5.000 1st Qu.:1954 1st Qu.:1967 Gable :1141
## Median :5.000 Median :1973 Median :1994 Gambrel: 11
## Mean :5.575 Mean :1971 Mean :1985 Hip : 286
## 3rd Qu.:6.000 3rd Qu.:2000 3rd Qu.:2004 Mansard: 7
## Max. :9.000 Max. :2010 Max. :2010 Shed : 2
##
## RoofMatl Exterior1st Exterior2nd MasVnrType MasVnrArea
## CompShg:1434 VinylSd:515 VinylSd:504 BrkCmn : 15 Min. : 0.0
## Tar&Grv: 11 HdBoard:222 MetalSd:214 BrkFace:445 1st Qu.: 0.0
## WdShngl: 6 MetalSd:220 HdBoard:207 None :864 Median : 0.0
## WdShake: 5 Wd Sdng:206 Wd Sdng:197 Stone :128 Mean : 103.7
## ClyTile: 1 Plywood:108 Plywood:142 NA's : 8 3rd Qu.: 166.0
## Membran: 1 CemntBd: 61 CmentBd: 60 Max. :1600.0
## (Other): 2 (Other):128 (Other):136 NA's :8
## ExterQual ExterCond Foundation BsmtQual BsmtCond BsmtExposure
## Ex: 52 Ex: 3 BrkTil:146 Ex :121 Fa : 45 Av :221
## Fa: 14 Fa: 28 CBlock:634 Fa : 35 Gd : 65 Gd :134
## Gd:488 Gd: 146 PConc :647 Gd :618 Po : 2 Mn :114
## TA:906 Po: 1 Slab : 24 TA :649 TA :1311 No :953
## TA:1282 Stone : 6 NA's: 37 NA's: 37 NA's: 38
## Wood : 3
##
## BsmtFinType1 BsmtFinSF1 BsmtFinType2 BsmtFinSF2
## ALQ :220 Min. : 0.0 ALQ : 19 Min. : 0.00
## BLQ :148 1st Qu.: 0.0 BLQ : 33 1st Qu.: 0.00

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## GLQ :418      Median : 383.5   GLQ : 14      Median : 0.00
## LwQ : 74      Mean : 443.6    LwQ : 46     Mean : 46.55
## Rec :133     3rd Qu.: 712.2   Rec : 54     3rd Qu.: 0.00
## Unf :430     Max. :5644.0    Unf :1256    Max. :1474.00
## NA's: 37      NA's: 38
## BsmUnfSF      TotalBsmSF      Heating      HeatingQC CentralAir
## Min. : 0.0    Min. : 0.0    Floor: 1    Ex:741    N: 95
## 1st Qu.: 223.0 1st Qu.: 795.8 GasA :1428   Fa: 49    Y:1365
## Median : 477.5 Median : 991.5 GasW : 18    Gd:241
## Mean : 567.2   Mean :1057.4 Grav : 7    Po: 1
## 3rd Qu.: 808.0 3rd Qu.:1298.2 OthW : 2    TA:428
## Max. :2336.0   Max. :6110.0 Wall : 4
##
## Electrical      X1stFlrSF      X2ndFlrSF      LowQualFinSF
## FuseA: 94      Min. : 334    Min. : 0      Min. : 0.000
## FuseF: 27      1st Qu.: 882  1st Qu.: 0    1st Qu.: 0.000
## FuseP: 3       Median :1087   Median : 0    Median : 0.000
## Mix : 1        Mean :1163     Mean : 347    Mean : 5.845
## SBrkr:1334     3rd Qu.:1391  3rd Qu.: 728  3rd Qu.: 0.000
## NA's : 1       Max. :4692     Max. :2065    Max. :572.000
##
## GrLivArea      BsmFullBath      BsmHalfBath      FullBath
## Min. : 334     Min. :0.0000    Min. :0.00000    Min. :0.000
## 1st Qu.:1130   1st Qu.:0.0000  1st Qu.:0.00000  1st Qu.:1.000
## Median :1464   Median :0.0000  Median :0.00000  Median :2.000
## Mean :1515     Mean :0.4253    Mean :0.05753    Mean :1.565
## 3rd Qu.:1777   3rd Qu.:1.0000  3rd Qu.:0.00000  3rd Qu.:2.000
## Max. :5642     Max. :3.0000    Max. :2.00000    Max. :3.000
##
## HalfBath      BedroomAbvGr      KitchenAbvGr      KitchenQual
## Min. :0.0000   Min. :0.000    Min. :0.000    Ex:100
## 1st Qu.:0.0000 1st Qu.:2.000    1st Qu.:1.000    Fa: 39
## Median :0.0000 Median :3.000    Median :1.000    Gd:586
## Mean :0.3829   Mean :2.866     Mean :1.047     TA:735
## 3rd Qu.:1.0000 3rd Qu.:3.000    3rd Qu.:1.000
## Max. :2.0000   Max. :8.000     Max. :3.000
##
## TotRmsAbvGrd Functional      Fireplaces      FireplaceQu      GarageType
## Min. : 2.000   Maj1: 14    Min. :0.000    Ex : 24    2Types : 6
## 1st Qu.: 5.000 Maj2: 5     1st Qu.:0.000  Fa : 33    Attchd :870
## Median : 6.000 Min1: 31    Median :1.000  Gd :380    Basement: 19
## Mean : 6.518   Min2: 34    Mean :0.613    Po : 20    BuiltIn: 88
## 3rd Qu.: 7.000 Mod : 15    3rd Qu.:1.000  TA :313    CarPort: 9
## Max. :14.000  Sev : 1     Max. :3.000    NA's:690   Detchd :387
## Typ :1360      NA's : 81
## GarageYrBlt   GarageFinish      GarageCars      GarageArea      GarageQual
## Min. :1900     Fin :352    Min. :0.000    Min. : 0.0    Ex : 3
## 1st Qu.:1961   RFn :422    1st Qu.:1.000  1st Qu.: 334.5 Fa : 48
## Median :1980   Unf :605    Median :2.000  Median : 480.0 Gd : 14
## Mean :1979     NA's: 81    Mean :1.767    Mean : 473.0  Po : 3
## 3rd Qu.:2002      3rd Qu.:2.000 3rd Qu.: 576.0 TA :1311
## Max. :2010      Max. :4.000   Max. :1418.0  NA's: 81
## NA's :81
## GarageCond   PavedDrive      WoodDeckSF      OpenPorchSF      EnclosedPorch

```

```

## Ex : 2 N: 90 Min. : 0.00 Min. : 0.00 Min. : 0.00
## Fa : 35 P: 30 1st Qu.: 0.00 1st Qu.: 0.00 1st Qu.: 0.00
## Gd : 9 Y:1340 Median : 0.00 Median : 25.00 Median : 0.00
## Po : 7 Mean : 94.24 Mean : 46.66 Mean : 21.95
## TA :1326 3rd Qu.:168.00 3rd Qu.: 68.00 3rd Qu.: 0.00
## NA's: 81 Max. :857.00 Max. :547.00 Max. :552.00
##
## X3SsnPorch ScreenPorch PoolArea PoolQC
## Min. : 0.00 Min. : 0.00 Min. : 0.000 Ex : 2
## 1st Qu.: 0.00 1st Qu.: 0.00 1st Qu.: 0.000 Fa : 2
## Median : 0.00 Median : 0.00 Median : 0.000 Gd : 3
## Mean : 3.41 Mean : 15.06 Mean : 2.759 NA's:1453
## 3rd Qu.: 0.00 3rd Qu.: 0.00 3rd Qu.: 0.000
## Max. :508.00 Max. :480.00 Max. :738.000
##
## Fence MiscFeature MiscVal MoSold
## GdPrv: 59 Gar2: 2 Min. : 0.00 Min. : 1.000
## GdWo : 54 Othr: 2 1st Qu.: 0.00 1st Qu.: 5.000
## MnPrv: 157 Shed: 49 Median : 0.00 Median : 6.000
## MnWw : 11 TenC: 1 Mean : 43.49 Mean : 6.322
## NA's :1179 NA's:1406 3rd Qu.: 0.00 3rd Qu.: 8.000
## Max. :15500.00 Max. :12.000
##
## YrSold SaleType SaleCondition SalePrice
## Min. :2006 WD :1267 Abnorml: 101 Min. : 34900
## 1st Qu.:2007 New : 122 AdjLand: 4 1st Qu.:129975
## Median :2008 COD : 43 Alloca : 12 Median :163000
## Mean :2008 ConLD : 9 Family : 20 Mean :180921
## 3rd Qu.:2009 ConLI : 5 Normal :1198 3rd Qu.:214000
## Max. :2010 ConLw : 5 Partial: 125 Max. :755000
## (Other): 9

```

```
str(data)
```

```

## 'data.frame': 1460 obs. of 81 variables:
## $ Id : int 1 2 3 4 5 6 7 8 9 10 ...
## $ MSSubClass : int 60 20 60 70 60 50 20 60 50 190 ...
## $ MSZoning : Factor w/ 5 levels "C (all)","FV",...: 4 4 4 4 4 4 4 4 5 4 ...
## $ LotFrontage : int 65 80 68 60 84 85 75 NA 51 50 ...
## $ LotArea : int 8450 9600 11250 9550 14260 14115 10084 10382 6120 7420 ...
## $ Street : Factor w/ 2 levels "Grvl","Pave": 2 2 2 2 2 2 2 2 2 2 ...
## $ Alley : Factor w/ 2 levels "Grvl","Pave": NA NA NA NA NA NA NA NA NA ...
## $ LotShape : Factor w/ 4 levels "IR1","IR2","IR3",...: 4 4 1 1 1 1 4 1 4 4 ...
## $ LandContour : Factor w/ 4 levels "Bnk","HLS","Low",...: 4 4 4 4 4 4 4 4 4 4 ...
## $ Utilities : Factor w/ 2 levels "AllPub","NoSeWa": 1 1 1 1 1 1 1 1 1 1 ...
## $ LotConfig : Factor w/ 5 levels "Corner","CulDSac",...: 5 3 5 1 3 5 5 1 5 1 ...
## $ LandSlope : Factor w/ 3 levels "Gtl","Mod","Sev": 1 1 1 1 1 1 1 1 1 1 ...
## $ Neighborhood : Factor w/ 25 levels "Blmngtn","Blueste",...: 6 25 6 7 14 12 21 17 18 4 ...
## $ Condition1 : Factor w/ 9 levels "Artery","Feedr",...: 3 2 3 3 3 3 3 5 1 1 ...
## $ Condition2 : Factor w/ 8 levels "Artery","Feedr",...: 3 3 3 3 3 3 3 3 1 ...
## $ BldgType : Factor w/ 5 levels "1fam","2fmCon",...: 1 1 1 1 1 1 1 1 1 2 ...
## $ HouseStyle : Factor w/ 8 levels "1.5Fin","1.5Unf",...: 6 3 6 6 6 1 3 6 1 2 ...
## $ OverallQual : int 7 6 7 7 8 5 8 7 7 5 ...
## $ OverallCond : int 5 8 5 5 5 5 5 6 5 6 ...
## $ YearBuilt : int 2003 1976 2001 1915 2000 1993 2004 1973 1931 1939 ...

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## $ YearRemodAdd : int 2003 1976 2002 1970 2000 1995 2005 1973 1950 1950 ...
## $ RoofStyle : Factor w/ 6 levels "Flat","Gable",...: 2 2 2 2 2 2 2 2 2 ...
## $ RoofMatl : Factor w/ 8 levels "ClyTile","CompShg",...: 2 2 2 2 2 2 2 2 ...
## $ Exterior1st : Factor w/ 15 levels "AsbShng","AsphShn",...: 13 9 13 14 13 13 13 7 4 9 ...
## $ Exterior2nd : Factor w/ 16 levels "AsbShng","AsphShn",...: 14 9 14 16 14 14 14 7 16 9 ...
## $ MasVnrType : Factor w/ 4 levels "BrkCmn","BrkFace",...: 2 3 2 3 2 3 4 4 3 3 ...
## $ MasVnrArea : int 196 0 162 0 350 0 186 240 0 0 ...
## $ ExterQual : Factor w/ 4 levels "Ex","Fa","Gd",...: 3 4 3 4 3 4 3 4 4 ...
## $ ExterCond : Factor w/ 5 levels "Ex","Fa","Gd",...: 5 5 5 5 5 5 5 5 5 ...
## $ Foundation : Factor w/ 6 levels "BrkTil","CBlock",...: 3 2 3 1 3 6 3 2 1 1 ...
## $ BsmtQual : Factor w/ 4 levels "Ex","Fa","Gd",...: 3 3 3 4 3 3 1 3 4 4 ...
## $ BsmtCond : Factor w/ 4 levels "Fa","Gd","Po",...: 4 4 4 2 4 4 4 4 4 4 ...
## $ BsmtExposure : Factor w/ 4 levels "Av","Gd","Mn",...: 4 2 3 4 1 4 1 3 4 4 ...
## $ BsmtFinType1 : Factor w/ 6 levels "ALQ","BLQ","GLQ",...: 3 1 3 1 3 3 3 1 6 3 ...
## $ BsmtFinSF1 : int 706 978 486 216 655 732 1369 859 0 851 ...
## $ BsmtFinType2 : Factor w/ 6 levels "ALQ","BLQ","GLQ",...: 6 6 6 6 6 6 6 2 6 6 ...
## $ BsmtFinSF2 : int 0 0 0 0 0 0 0 32 0 0 ...
## $ BsmtUnfSF : int 150 284 434 540 490 64 317 216 952 140 ...
## $ TotalBsmtSF : int 856 1262 920 756 1145 796 1686 1107 952 991 ...
## $ Heating : Factor w/ 6 levels "Floor","GasA",...: 2 2 2 2 2 2 2 2 2 ...
## $ HeatingQC : Factor w/ 5 levels "Ex","Fa","Gd",...: 1 1 1 3 1 1 1 1 3 1 ...
## $ CentralAir : Factor w/ 2 levels "N","Y": 2 2 2 2 2 2 2 2 2 ...
## $ Electrical : Factor w/ 5 levels "FuseA","FuseF",...: 5 5 5 5 5 5 5 5 2 5 ...
## $ X1stFlrSF : int 856 1262 920 961 1145 796 1694 1107 1022 1077 ...
## $ X2ndFlrSF : int 854 0 866 756 1053 566 0 983 752 0 ...
## $ LowQualFinSF : int 0 0 0 0 0 0 0 0 0 0 ...
## $ GrLivArea : int 1710 1262 1786 1717 2198 1362 1694 2090 1774 1077 ...
## $ BsmtFullBath : int 1 0 1 1 1 1 1 1 0 1 ...
## $ BsmtHalfBath : int 0 1 0 0 0 0 0 0 0 0 ...
## $ FullBath : int 2 2 2 1 2 1 2 2 2 1 ...
## $ HalfBath : int 1 0 1 0 1 1 0 1 0 0 ...
## $ BedroomAbvGr : int 3 3 3 3 4 1 3 3 2 2 ...
## $ KitchenAbvGr : int 1 1 1 1 1 1 1 1 2 2 ...
## $ KitchenQual : Factor w/ 4 levels "Ex","Fa","Gd",...: 3 4 3 3 3 4 3 4 4 4 ...
## $ TotRmsAbvGrd : int 8 6 6 7 9 5 7 7 8 5 ...
## $ Functional : Factor w/ 7 levels "Maj1","Maj2",...: 7 7 7 7 7 7 7 3 7 ...
## $ Fireplaces : int 0 1 1 1 1 0 1 2 2 2 ...
## $ FireplaceQu : Factor w/ 5 levels "Ex","Fa","Gd",...: NA 5 5 3 5 NA 3 5 5 5 ...
## $ GarageType : Factor w/ 6 levels "2Types","Attchd",...: 2 2 2 6 2 2 2 2 6 2 ...
## $ GarageYrBlt : int 2003 1976 2001 1998 2000 1993 2004 1973 1931 1939 ...
## $ GarageFinish : Factor w/ 3 levels "Fin","RFn","Unf": 2 2 2 3 2 3 2 2 3 2 ...
## $ GarageCars : int 2 2 2 3 3 2 2 2 2 1 ...
## $ GarageArea : int 548 460 608 642 836 480 636 484 468 205 ...
## $ GarageQual : Factor w/ 5 levels "Ex","Fa","Gd",...: 5 5 5 5 5 5 5 5 2 3 ...
## $ GarageCond : Factor w/ 5 levels "Ex","Fa","Gd",...: 5 5 5 5 5 5 5 5 5 5 ...
## $ PavedDrive : Factor w/ 3 levels "N","P","Y": 3 3 3 3 3 3 3 3 3 3 ...
## $ WoodDeckSF : int 0 298 0 0 192 40 255 235 90 0 ...
## $ OpenPorchSF : int 61 0 42 35 84 30 57 204 0 4 ...
## $ EnclosedPorch : int 0 0 0 272 0 0 0 228 205 0 ...
## $ X3SsnPorch : int 0 0 0 0 0 320 0 0 0 0 ...
## $ ScreenPorch : int 0 0 0 0 0 0 0 0 0 0 ...
## $ PoolArea : int 0 0 0 0 0 0 0 0 0 0 ...
## $ PoolQC : Factor w/ 3 levels "Ex","Fa","Gd": NA NA NA NA NA NA NA NA NA NA ...
## $ Fence : Factor w/ 4 levels "GdPrv","GdWo",...: NA NA NA NA NA 3 NA NA NA NA ...

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## $ MiscFeature : Factor w/ 4 levels "Gar2","Othr",...: NA NA NA NA NA 3 NA 3 NA NA ...
## $ MiscVal     : int  0 0 0 0 0 700 0 350 0 0 ...
## $ MoSold      : int  2 5 9 2 12 10 8 11 4 1 ...
## $ YrSold      : int  2008 2007 2008 2006 2008 2009 2007 2009 2008 2008 ...
## $ SaleType    : Factor w/ 9 levels "COD","Con","ConLD",...: 9 9 9 9 9 9 9 9 9 9 ...
## $ SaleCondition: Factor w/ 6 levels "Abnorml","AdjLand",...: 5 5 5 1 5 5 5 5 1 5 ...
## $ SalePrice   : int  208500 181500 223500 140000 250000 143000 307000 200000 129900 118000 ...

```