Linear regression of Brooklyn Housing Data

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```r
# Brooklyn housing data - rolling sales (Doing Data Science)
#
library(plyr)
require(gdata)
```

```
## Loading required package: gdata
## gdata: read.xls support for 'XLS' (Excel 97-2004) files ENABLED.
##
## gdata: read.xls support for 'XLSX' (Excel 2007+) files ENABLED.
##
## Attaching package: 'gdata'
##
## The following object is masked from 'package:stats':
##
##      nobs
##
## The following object is masked from 'package:utils':
##
##      object.size
```

```r
bk <- read.xls("/Users/Jon/Desktop/R-Projects/Brooklyn/rollingsales_brooklyn.xls",pattern="BOROUGH")
#
bk$SALE.PRICE.N <- as.numeric(gsub("[^[:digit:]]","",bk$SALE.PRICE))
# count using plyr package,
# see http://www.inside-r.org/packages/cran/plyr/docs/count
count(is.na(bk$SALE.PRICE.N))
```

```
##       x  freq
## 1 FALSE 23373
```

```r
# convert to lower case using chartr package,
# see http://www.inside-r.org/r-doc/base/tolower
names(bk) <- tolower(names(bk))

## clean/format the data with regular expressions
bk$gross.sqft <- as.numeric(gsub("[^[:digit:]]","",bk$gross.square.feet))
bk$land.sqft <- as.numeric(gsub("[^[:digit:]]","",bk$land.square.feet))

bk$sale.date <- as.Date(bk$sale.date)
bk$year.built <- as.numeric(as.character(bk$year.built))
#
## keep only the actual sales
bk.sale <- bk[bk$sale.price.n!=0,]

# look at 1,2, and 3-family homes
bk.homes <- bk.sale[which(grepl("FAMILY",bk.sale$building.class.category)),]
```

```
# To sort a data frame in R, use the order( ) function.
# By default, sorting is ASCENDING, http://www.statmethods.net/management/sorting.html
# bk.homes[which(bk.homes$sale.price.n<100000),]
# bk.homes[order(bk.homes[which(bk.homes$sale.price.n<100000),]$sale.price.n),]

## remove ouliers that seem like they weren't actual sales
bk.homes$outliers <- (log(bk.homes$sale.price.n) <=5) + 0
bk.homes <- bk.homes[which(bk.homes$outliers==0),]

# linear regression
# model1 <- lm(log(sale.price.n) ~ log(gross.sqft),data=bk.homes)
# didnt work, some entries have zero sqft
#bk.homes[which(bk.homes$gross.sqft==0),]

bk.homes <- bk.homes[which(bk.homes$gross.sqft>0 &
          bk.homes$land.sqft>0),]

model1 <- lm(log(sale.price.n) ~ log(gross.sqft),data=bk.homes)
summary(model1)
```
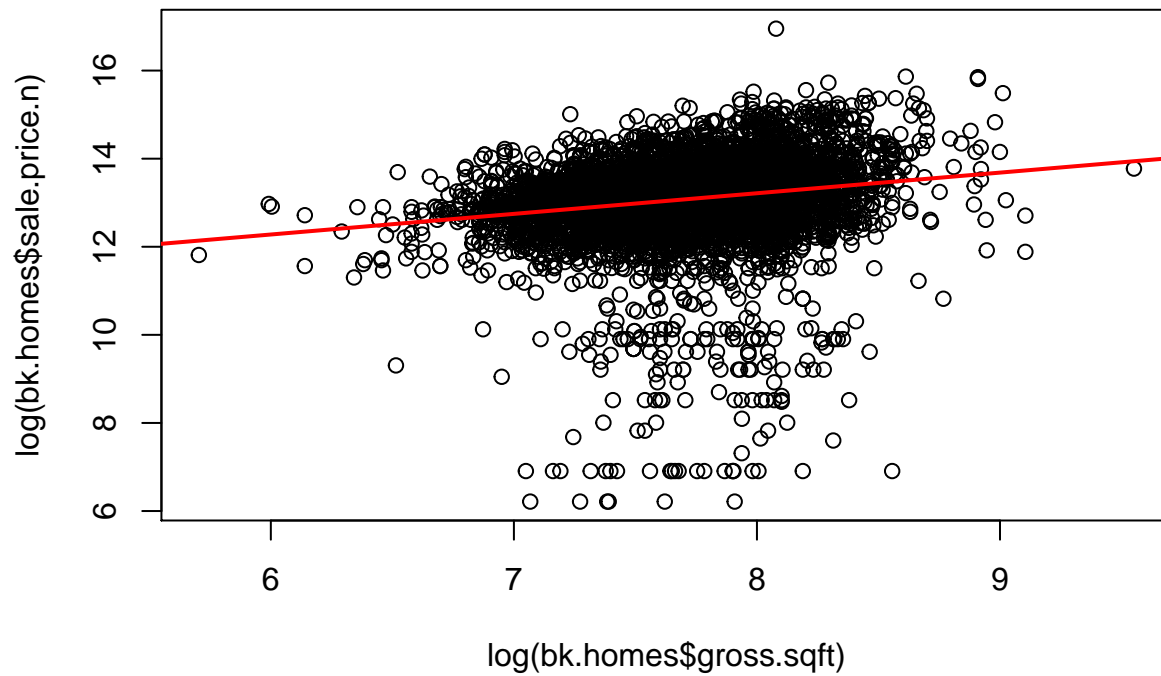
```
##
## Call:
## lm(formula = log(sale.price.n) ~ log(gross.sqft), data = bk.homes)
##
## Residuals:
##     Min     1Q Median     3Q    Max
## -6.957 -0.293  0.141  0.470  3.700
##
## Coefficients:
##                 Estimate Std. Error t value Pr(>|t|)
## (Intercept)       9.4672     0.2342    40.4   <2e-16 ***
## log(gross.sqft)   0.4684     0.0303    15.4   <2e-16 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.937 on 6397 degrees of freedom
## Multiple R-squared:  0.036,  Adjusted R-squared:  0.0358
## F-statistic:  239 on 1 and 6397 DF,  p-value: <2e-16
```

```
# Residual standard error: 0.9366 on 6397 degrees of freedom
# Multiple R-squared:  0.03595,  Adjusted R-squared:  0.0358
# F-statistic: 238.6 on 1 and 6397 DF,  p-value: < 2.2e-16

plot(log(bk.homes$gross.sqft),log(bk.homes$sale.price.n))
# overlay the fit
abline(model1,col="red",lwd=2)
```

```
#look at the residuals
plot(resid(model1))
```
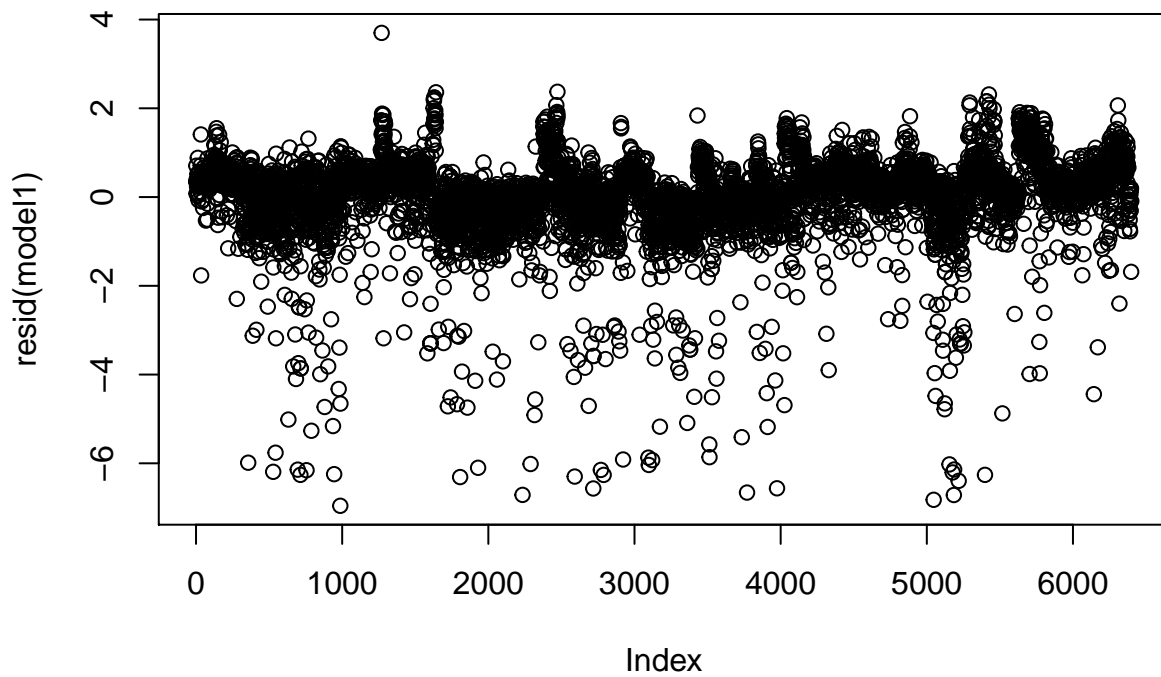


```
model2 <- lm(log(sale.price.n) ~ log(gross.sqft) +
        log(land.sqft) + factor(neighborhood),data=bk.homes)
summary(model2)
```

```
##
## Call:
```

```
## lm(formula = log(sale.price.n) ~ log(gross.sqft) + log(land.sqft) +
##     factor(neighborhood), data = bk.homes)
##
## Residuals:
##    Min     1Q Median     3Q    Max
## -6.694 -0.126  0.118  0.353  2.610
##
## Coefficients:
##                                              Estimate Std. Error t value
## (Intercept)                                   7.97615    0.31524   25.30
## log(gross.sqft)                               0.34665    0.03020   11.48
## log(land.sqft)                                0.35642    0.03473   10.26
## factor(neighborhood)BAY RIDGE                 0.10100    0.09732    1.04
## factor(neighborhood)BEDFORD STUYVESANT       -0.56322    0.08819   -6.39
## factor(neighborhood)BENSONHURST              -0.00767    0.09875   -0.08
## factor(neighborhood)BERGEN BEACH             -0.20248    0.13688   -1.48
## factor(neighborhood)BOERUM HILL               1.01065    0.16170    6.25
## factor(neighborhood)BOROUGH PARK              0.01424    0.09418    0.15
## factor(neighborhood)BRIGHTON BEACH           -0.85194    0.16746   -5.09
## factor(neighborhood)BROOKLYN HEIGHTS          1.60268    0.19721    8.13
## factor(neighborhood)BROWNSVILLE              -0.82231    0.13112   -6.27
## factor(neighborhood)BUSH TERMINAL            -0.16408    0.33566   -0.49
## factor(neighborhood)BUSHWICK                 -0.74426    0.09242   -8.05
## factor(neighborhood)CANARSIE                 -0.67281    0.09475   -7.10
## factor(neighborhood)CARROLL GARDENS           0.96632    0.16023    6.03
## factor(neighborhood)CLINTON HILL              0.39240    0.14368    2.73
## factor(neighborhood)COBBLE HILL               1.27940    0.20132    6.36
## factor(neighborhood)COBBLE HILL-WEST          0.50480    0.40723    1.24
## factor(neighborhood)CONEY ISLAND             -0.52517    0.21041   -2.50
## factor(neighborhood)CROWN HEIGHTS            -0.54781    0.09717   -5.64
## factor(neighborhood)CYPRESS HILLS            -0.83112    0.10225   -8.13
## factor(neighborhood)DOWNTOWN-FULTON FERRY     0.43171    0.80158    0.54
## factor(neighborhood)DOWNTOWN-FULTON MALL      0.28408    0.46789    0.61
## factor(neighborhood)DOWNTOWN-METROTECH        1.38479    0.80167    1.73
## factor(neighborhood)DYKER HEIGHTS            -0.02038    0.10113   -0.20
## factor(neighborhood)EAST NEW YORK            -0.99546    0.09260  -10.75
## factor(neighborhood)FLATBUSH-CENTRAL         -0.49737    0.10646   -4.67
## factor(neighborhood)FLATBUSH-EAST            -0.57443    0.09570   -6.00
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN -0.20914    0.13166   -1.59
## factor(neighborhood)FLATBUSH-NORTH           -0.84544    0.12233   -6.91
## factor(neighborhood)FLATLANDS                -0.84303    0.13367   -6.31
## factor(neighborhood)FORT GREENE               0.79021    0.14862    5.32
## factor(neighborhood)GERRITSEN BEACH          -0.70758    0.14055   -5.03
## factor(neighborhood)GOWANUS                   0.56581    0.14708    3.85
## factor(neighborhood)GRAVESEND                -0.07558    0.09883   -0.76
## factor(neighborhood)GREENPOINT                0.19707    0.12862    1.53
## factor(neighborhood)KENSINGTON                0.05662    0.15943    0.36
## factor(neighborhood)MADISON                  -0.05285    0.10834   -0.49
## factor(neighborhood)MANHATTAN BEACH           0.04416    0.16342    0.27
## factor(neighborhood)MARINE PARK              -0.24065    0.10267   -2.34
## factor(neighborhood)MIDWOOD                  -0.07385    0.10189   -0.72
## factor(neighborhood)MILL BASIN               -0.17516    0.13683   -1.28
## factor(neighborhood)NAVY YARD                -0.16810    0.26579   -0.63
## factor(neighborhood)OCEAN HILL               -1.07886    0.09894  -10.90
```

```
## factor(neighborhood)OCEAN PARKWAY-NORTH        0.01028     0.10405     0.10
## factor(neighborhood)OCEAN PARKWAY-SOUTH        0.06963     0.10893     0.64
## factor(neighborhood)OLD MILL BASIN            -0.43325     0.11547    -3.75
## factor(neighborhood)PARK SLOPE                 0.97339     0.11448     8.50
## factor(neighborhood)PARK SLOPE SOUTH           0.43927     0.13811     3.18
## factor(neighborhood)PROSPECT HEIGHTS           0.57327     0.16761     3.42
## factor(neighborhood)RED HOOK                   0.19745     0.21580     0.91
## factor(neighborhood)SEAGATE                   -0.50054     0.29395    -1.70
## factor(neighborhood)SHEEPSHEAD BAY            -0.18388     0.10276    -1.79
## factor(neighborhood)SPRING CREEK              -0.48432     0.15309    -3.16
## factor(neighborhood)SUNSET PARK                0.04157     0.10050     0.41
## factor(neighborhood)WILLIAMSBURG-CENTRAL      -0.20456     0.21044    -0.97
## factor(neighborhood)WILLIAMSBURG-EAST          0.33848     0.13775     2.46
## factor(neighborhood)WILLIAMSBURG-NORTH         0.80646     0.21572     3.74
## factor(neighborhood)WILLIAMSBURG-SOUTH         0.10260     0.33588     0.31
## factor(neighborhood)WINDSOR TERRACE            0.43287     0.13769     3.14
## factor(neighborhood)WYCKOFF HEIGHTS           -0.42809     0.18244    -2.35
##                                               Pr(>|t|)
## (Intercept)                                   < 2e-16 ***
## log(gross.sqft)                               < 2e-16 ***
## log(land.sqft)                                < 2e-16 ***
## factor(neighborhood)BAY RIDGE                 0.29942
## factor(neighborhood)BEDFORD STUYVESANT        1.8e-10 ***
## factor(neighborhood)BENSONHURST               0.93812
## factor(neighborhood)BERGEN BEACH              0.13913
## factor(neighborhood)BOERUM HILL               4.4e-10 ***
## factor(neighborhood)BOROUGH PARK              0.87982
## factor(neighborhood)BRIGHTON BEACH            3.7e-07 ***
## factor(neighborhood)BROOKLYN HEIGHTS          5.3e-16 ***
## factor(neighborhood)BROWNSVILLE               3.8e-10 ***
## factor(neighborhood)BUSH TERMINAL             0.62499
## factor(neighborhood)BUSHWICK                  9.6e-16 ***
## factor(neighborhood)CANARSIE                  1.4e-12 ***
## factor(neighborhood)CARROLL GARDENS           1.7e-09 ***
## factor(neighborhood)CLINTON HILL              0.00633 **
## factor(neighborhood)COBBLE HILL               2.2e-10 ***
## factor(neighborhood)COBBLE HILL-WEST          0.21517
## factor(neighborhood)CONEY ISLAND              0.01259 *
## factor(neighborhood)CROWN HEIGHTS             1.8e-08 ***
## factor(neighborhood)CYPRESS HILLS             5.2e-16 ***
## factor(neighborhood)DOWNTOWN-FULTON FERRY     0.59020
## factor(neighborhood)DOWNTOWN-FULTON MALL      0.54377
## factor(neighborhood)DOWNTOWN-METROTECH        0.08415 .
## factor(neighborhood)DYKER HEIGHTS             0.84030
## factor(neighborhood)EAST NEW YORK             < 2e-16 ***
## factor(neighborhood)FLATBUSH-CENTRAL          3.0e-06 ***
## factor(neighborhood)FLATBUSH-EAST             2.1e-09 ***
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN  0.11221
## factor(neighborhood)FLATBUSH-NORTH            5.3e-12 ***
## factor(neighborhood)FLATLANDS                 3.0e-10 ***
## factor(neighborhood)FORT GREENE               1.1e-07 ***
## factor(neighborhood)GERRITSEN BEACH           4.9e-07 ***
## factor(neighborhood)GOWANUS                   0.00012 ***
## factor(neighborhood)GRAVESEND                 0.44442
```

```
## factor(neighborhood)GREENPOINT             0.12552
## factor(neighborhood)KENSINGTON             0.72250
## factor(neighborhood)MADISON                0.62572
## factor(neighborhood)MANHATTAN BEACH        0.78697
## factor(neighborhood)MARINE PARK            0.01911 *
## factor(neighborhood)MIDWOOD                0.46864
## factor(neighborhood)MILL BASIN             0.20053
## factor(neighborhood)NAVY YARD              0.52713
## factor(neighborhood)OCEAN HILL             < 2e-16 ***
## factor(neighborhood)OCEAN PARKWAY-NORTH    0.92129
## factor(neighborhood)OCEAN PARKWAY-SOUTH    0.52268
## factor(neighborhood)OLD MILL BASIN         0.00018 ***
## factor(neighborhood)PARK SLOPE             < 2e-16 ***
## factor(neighborhood)PARK SLOPE SOUTH       0.00148 **
## factor(neighborhood)PROSPECT HEIGHTS       0.00063 ***
## factor(neighborhood)RED HOOK               0.36024
## factor(neighborhood)SEAGATE                0.08865 .
## factor(neighborhood)SHEEPSHEAD BAY         0.07359 .
## factor(neighborhood)SPRING CREEK           0.00157 **
## factor(neighborhood)SUNSET PARK            0.67914
## factor(neighborhood)WILLIAMSBURG-CENTRAL   0.33106
## factor(neighborhood)WILLIAMSBURG-EAST      0.01403 *
## factor(neighborhood)WILLIAMSBURG-NORTH     0.00019 ***
## factor(neighborhood)WILLIAMSBURG-SOUTH     0.76002
## factor(neighborhood)WINDSOR TERRACE        0.00167 **
## factor(neighborhood)WYCKOFF HEIGHTS        0.01898 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.797 on 6337 degrees of freedom
## Multiple R-squared:  0.308,  Adjusted R-squared:  0.301
## F-statistic: 46.2 on 61 and 6337 DF,  p-value: <2e-16
```

```
plot(resid(model2))
```
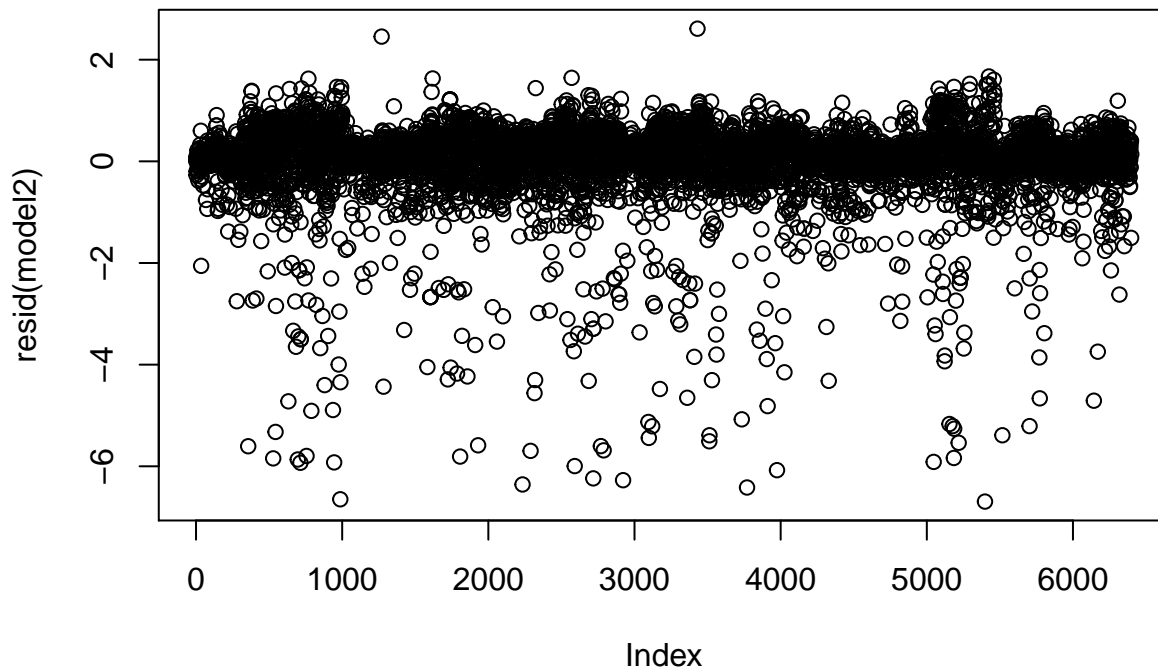
```
# Residual standard error: 0.7973 on 6337 degrees of freedom
# Multiple R-squared:  0.3078,  Adjusted R-squared:  0.3012
# F-statistic:  46.2 on 61 and 6337 DF,  p-value: < 2.2e-16


# leave out intercept for easier interpretation
model2a <- lm(log(sale.price.n) ~ 0 + log(gross.sqft) +
                log(land.sqft) + factor(neighborhood),data=bk.homes)
summary(model2a)
```

```
##
## Call:
## lm(formula = log(sale.price.n) ~ 0 + log(gross.sqft) + log(land.sqft) +
##     factor(neighborhood), data = bk.homes)
##
## Residuals:
##    Min    1Q Median    3Q    Max
## -6.694 -0.126  0.118  0.353  2.610
##
## Coefficients:
##                                     Estimate Std. Error t value
## log(gross.sqft)                       0.3467     0.0302   11.48
## log(land.sqft)                        0.3564     0.0347   10.26
## factor(neighborhood)BATH BEACH        7.9762     0.3152   25.30
## factor(neighborhood)BAY RIDGE         8.0772     0.3071   26.30
## factor(neighborhood)BEDFORD STUYVESANT 7.4129    0.3021   24.53
## factor(neighborhood)BENSONHURST       7.9685     0.3084   25.84
## factor(neighborhood)BERGEN BEACH      7.7737     0.3278   23.71
## factor(neighborhood)BOERUM HILL       8.9868     0.3320   27.07
## factor(neighborhood)BOROUGH PARK      7.9904     0.3079   25.96
## factor(neighborhood)BRIGHTON BEACH    7.1242     0.3260   21.85
## factor(neighborhood)BROOKLYN HEIGHTS  9.5788     0.3520   27.22
## factor(neighborhood)BROWNSVILLE       7.1538     0.3142   22.77
```

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```
## factor(neighborhood)BUSH TERMINAL            7.8121    0.4424   17.66
## factor(neighborhood)BUSHWICK                 7.2319    0.3048   23.73
## factor(neighborhood)CANARSIE                 7.3033    0.3033   24.08
## factor(neighborhood)CARROLL GARDENS          8.9425    0.3280   27.27
## factor(neighborhood)CLINTON HILL             8.3685    0.3236   25.86
## factor(neighborhood)COBBLE HILL              9.2555    0.3461   26.74
## factor(neighborhood)COBBLE HILL-WEST         8.4810    0.4967   17.07
## factor(neighborhood)CONEY ISLAND             7.4510    0.3568   20.88
## factor(neighborhood)CROWN HEIGHTS            7.4283    0.3080   24.11
## factor(neighborhood)CYPRESS HILLS            7.1450    0.3072   23.26
## factor(neighborhood)DOWNTOWN-FULTON FERRY    8.4079    0.8504    9.89
## factor(neighborhood)DOWNTOWN-FULTON MALL     8.2602    0.5539   14.91
## factor(neighborhood)DOWNTOWN-METROTECH       9.3609    0.8486   11.03
## factor(neighborhood)DYKER HEIGHTS            7.9558    0.3081   25.82
## factor(neighborhood)EAST NEW YORK            6.9807    0.3019   23.12
## factor(neighborhood)FLATBUSH-CENTRAL         7.4788    0.3177   23.54
## factor(neighborhood)FLATBUSH-EAST            7.4017    0.3032   24.41
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN 7.7670    0.3221   24.12
## factor(neighborhood)FLATBUSH-NORTH           7.1307    0.3139   22.72
## factor(neighborhood)FLATLANDS                7.1331    0.3194   22.33
## factor(neighborhood)FORT GREENE              8.7664    0.3259   26.90
## factor(neighborhood)GERRITSEN BEACH          7.2686    0.3104   23.42
## factor(neighborhood)GOWANUS                  8.5420    0.3170   26.95
## factor(neighborhood)GRAVESEND                7.9006    0.3051   25.89
## factor(neighborhood)GREENPOINT               8.1732    0.3168   25.80
## factor(neighborhood)KENSINGTON               8.0328    0.3297   24.36
## factor(neighborhood)MADISON                  7.9233    0.3114   25.44
## factor(neighborhood)MANHATTAN BEACH          8.0203    0.3435   23.35
## factor(neighborhood)MARINE PARK              7.7355    0.3021   25.60
## factor(neighborhood)MIDWOOD                  7.9023    0.3135   25.21
## factor(neighborhood)MILL BASIN               7.8010    0.3349   23.30
## factor(neighborhood)NAVY YARD                7.8081    0.3866   20.20
## factor(neighborhood)OCEAN HILL               6.8973    0.3032   22.75
## factor(neighborhood)OCEAN PARKWAY-NORTH      7.9864    0.3134   25.48
## factor(neighborhood)OCEAN PARKWAY-SOUTH      8.0458    0.3150   25.55
## factor(neighborhood)OLD MILL BASIN           7.5429    0.3054   24.70
## factor(neighborhood)PARK SLOPE               8.9495    0.3112   28.76
## factor(neighborhood)PARK SLOPE SOUTH         8.4154    0.3138   26.82
## factor(neighborhood)PROSPECT HEIGHTS         8.5494    0.3360   25.45
## factor(neighborhood)RED HOOK                 8.1736    0.3548   23.04
## factor(neighborhood)SEAGATE                  7.4756    0.4236   17.65
## factor(neighborhood)SHEEPSHEAD BAY           7.7923    0.3073   25.36
## factor(neighborhood)SPRING CREEK             7.4918    0.3272   22.90
## factor(neighborhood)SUNSET PARK              8.0177    0.3055   26.25
## factor(neighborhood)WILLIAMSBURG-CENTRAL     7.7716    0.3587   21.67
## factor(neighborhood)WILLIAMSBURG-EAST        8.3146    0.3174   26.20
## factor(neighborhood)WILLIAMSBURG-NORTH       8.7826    0.3590   24.46
## factor(neighborhood)WILLIAMSBURG-SOUTH       8.0788    0.4389   18.41
## factor(neighborhood)WINDSOR TERRACE          8.4090    0.3186   26.40
## factor(neighborhood)WYCKOFF HEIGHTS          7.5481    0.3447   21.90
##                                           Pr(>|t|)
## log(gross.sqft)                           <2e-16 ***
## log(land.sqft)                            <2e-16 ***
## factor(neighborhood)BATH BEACH            <2e-16 ***
```

```
## factor(neighborhood)BAY RIDGE                       <2e-16 ***
## factor(neighborhood)BEDFORD STUYVESANT              <2e-16 ***
## factor(neighborhood)BENSONHURST                     <2e-16 ***
## factor(neighborhood)BERGEN BEACH                     <2e-16 ***
## factor(neighborhood)BOERUM HILL                      <2e-16 ***
## factor(neighborhood)BOROUGH PARK                     <2e-16 ***
## factor(neighborhood)BRIGHTON BEACH                   <2e-16 ***
## factor(neighborhood)BROOKLYN HEIGHTS                 <2e-16 ***
## factor(neighborhood)BROWNSVILLE                      <2e-16 ***
## factor(neighborhood)BUSH TERMINAL                    <2e-16 ***
## factor(neighborhood)BUSHWICK                         <2e-16 ***
## factor(neighborhood)CANARSIE                         <2e-16 ***
## factor(neighborhood)CARROLL GARDENS                  <2e-16 ***
## factor(neighborhood)CLINTON HILL                     <2e-16 ***
## factor(neighborhood)COBBLE HILL                      <2e-16 ***
## factor(neighborhood)COBBLE HILL-WEST                 <2e-16 ***
## factor(neighborhood)CONEY ISLAND                     <2e-16 ***
## factor(neighborhood)CROWN HEIGHTS                    <2e-16 ***
## factor(neighborhood)CYPRESS HILLS                    <2e-16 ***
## factor(neighborhood)DOWNTOWN-FULTON FERRY            <2e-16 ***
## factor(neighborhood)DOWNTOWN-FULTON MALL             <2e-16 ***
## factor(neighborhood)DOWNTOWN-METROTECH               <2e-16 ***
## factor(neighborhood)DYKER HEIGHTS                    <2e-16 ***
## factor(neighborhood)EAST NEW YORK                    <2e-16 ***
## factor(neighborhood)FLATBUSH-CENTRAL                 <2e-16 ***
## factor(neighborhood)FLATBUSH-EAST                    <2e-16 ***
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN         <2e-16 ***
## factor(neighborhood)FLATBUSH-NORTH                   <2e-16 ***
## factor(neighborhood)FLATLANDS                        <2e-16 ***
## factor(neighborhood)FORT GREENE                      <2e-16 ***
## factor(neighborhood)GERRITSEN BEACH                  <2e-16 ***
## factor(neighborhood)GOWANUS                          <2e-16 ***
## factor(neighborhood)GRAVESEND                        <2e-16 ***
## factor(neighborhood)GREENPOINT                       <2e-16 ***
## factor(neighborhood)KENSINGTON                       <2e-16 ***
## factor(neighborhood)MADISON                          <2e-16 ***
## factor(neighborhood)MANHATTAN BEACH                  <2e-16 ***
## factor(neighborhood)MARINE PARK                      <2e-16 ***
## factor(neighborhood)MIDWOOD                          <2e-16 ***
## factor(neighborhood)MILL BASIN                       <2e-16 ***
## factor(neighborhood)NAVY YARD                        <2e-16 ***
## factor(neighborhood)OCEAN HILL                       <2e-16 ***
## factor(neighborhood)OCEAN PARKWAY-NORTH              <2e-16 ***
## factor(neighborhood)OCEAN PARKWAY-SOUTH              <2e-16 ***
## factor(neighborhood)OLD MILL BASIN                   <2e-16 ***
## factor(neighborhood)PARK SLOPE                       <2e-16 ***
## factor(neighborhood)PARK SLOPE SOUTH                 <2e-16 ***
## factor(neighborhood)PROSPECT HEIGHTS                 <2e-16 ***
## factor(neighborhood)RED HOOK                         <2e-16 ***
## factor(neighborhood)SEAGATE                          <2e-16 ***
## factor(neighborhood)SHEEPSHEAD BAY                   <2e-16 ***
## factor(neighborhood)SPRING CREEK                     <2e-16 ***
## factor(neighborhood)SUNSET PARK                      <2e-16 ***
## factor(neighborhood)WILLIAMSBURG-CENTRAL             <2e-16 ***
```

```
## factor(neighborhood)WILLIAMSBURG-EAST        <2e-16 ***
## factor(neighborhood)WILLIAMSBURG-NORTH       <2e-16 ***
## factor(neighborhood)WILLIAMSBURG-SOUTH       <2e-16 ***
## factor(neighborhood)WINDSOR TERRACE          <2e-16 ***
## factor(neighborhood)WYCKOFF HEIGHTS          <2e-16 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.797 on 6337 degrees of freedom
## Multiple R-squared:  0.996,  Adjusted R-squared:  0.996
## F-statistic: 2.78e+04 on 62 and 6337 DF,  p-value: <2e-16
```

```
plot(resid(model2a))
```
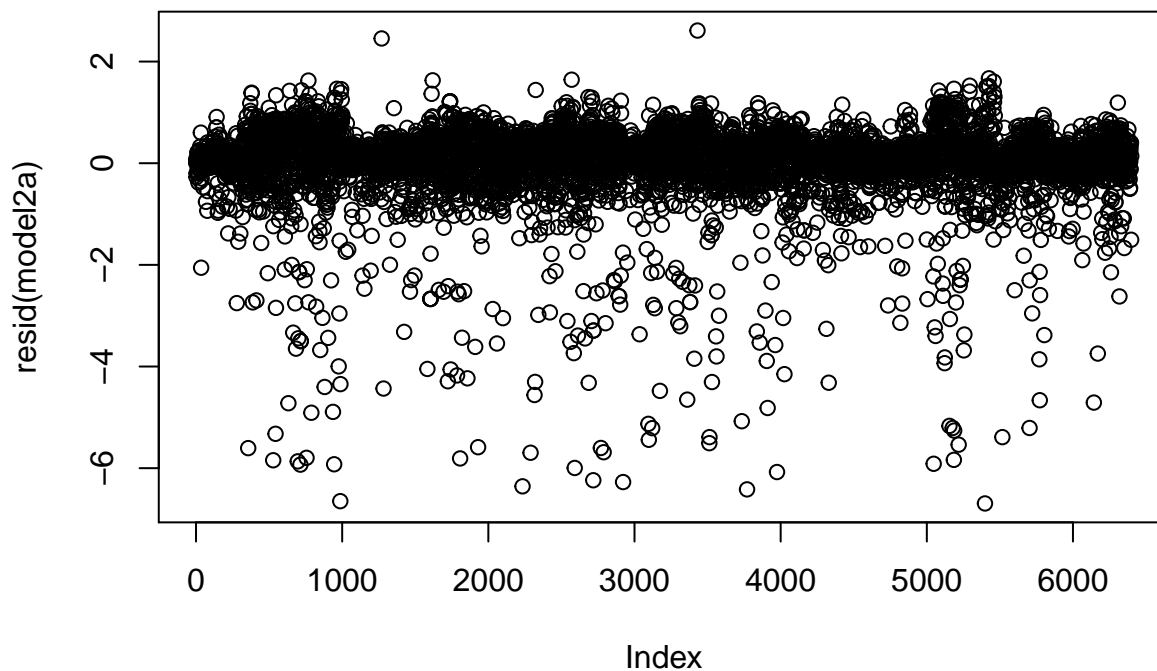


```
# Residual standard error: 0.7973 on 6337 degrees of freedom
# Multiple R-squared:  0.9963,  Adjusted R-squared:  0.9963
# F-statistic: 2.782e+04 on 62 and 6337 DF,  p-value: < 2.2e-16

# add building type for model3
model3 <- lm(log(sale.price.n) ~ log(gross.sqft) +
             log(land.sqft) + factor(neighborhood) +
             factor(building.class.category),data=bk.homes)
summary(model3)
```

```
##
## Call:
## lm(formula = log(sale.price.n) ~ log(gross.sqft) + log(land.sqft) +
##     factor(neighborhood) + factor(building.class.category), data = bk.homes)
##
## Residuals:
##     Min      1Q Median      3Q     Max
```

```
## -6.600 -0.126  0.118  0.350  2.662
##
## Coefficients:
##                                                     Estimate
## (Intercept)                                         7.62e+00
## log(gross.sqft)                                     4.10e-01
## log(land.sqft)                                      3.48e-01
## factor(neighborhood)BAY RIDGE                       7.53e-02
## factor(neighborhood)BEDFORD STUYVESANT             -5.59e-01
## factor(neighborhood)BENSONHURST                    -1.41e-02
## factor(neighborhood)BERGEN BEACH                   -2.24e-01
## factor(neighborhood)BOERUM HILL                     1.01e+00
## factor(neighborhood)BOROUGH PARK                    6.25e-03
## factor(neighborhood)BRIGHTON BEACH                 -8.55e-01
## factor(neighborhood)BROOKLYN HEIGHTS                1.55e+00
## factor(neighborhood)BROWNSVILLE                    -8.34e-01
## factor(neighborhood)BUSH TERMINAL                  -1.50e-01
## factor(neighborhood)BUSHWICK                       -7.39e-01
## factor(neighborhood)CANARSIE                       -6.72e-01
## factor(neighborhood)CARROLL GARDENS                 9.68e-01
## factor(neighborhood)CLINTON HILL                    3.87e-01
## factor(neighborhood)COBBLE HILL                     1.27e+00
## factor(neighborhood)COBBLE HILL-WEST                5.18e-01
## factor(neighborhood)CONEY ISLAND                   -5.47e-01
## factor(neighborhood)CROWN HEIGHTS                  -5.59e-01
## factor(neighborhood)CYPRESS HILLS                  -8.34e-01
## factor(neighborhood)DOWNTOWN-FULTON FERRY           4.28e-01
## factor(neighborhood)DOWNTOWN-FULTON MALL            2.06e-01
## factor(neighborhood)DOWNTOWN-METROTECH              1.39e+00
## factor(neighborhood)DYKER HEIGHTS                  -3.72e-02
## factor(neighborhood)EAST NEW YORK                  -9.90e-01
## factor(neighborhood)FLATBUSH-CENTRAL               -5.27e-01
## factor(neighborhood)FLATBUSH-EAST                  -5.92e-01
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN       -2.33e-01
## factor(neighborhood)FLATBUSH-NORTH                 -8.51e-01
## factor(neighborhood)FLATLANDS                      -8.63e-01
## factor(neighborhood)FORT GREENE                     7.87e-01
## factor(neighborhood)GERRITSEN BEACH                -7.25e-01
## factor(neighborhood)GOWANUS                         5.75e-01
## factor(neighborhood)GRAVESEND                      -7.99e-02
## factor(neighborhood)GREENPOINT                      2.17e-01
## factor(neighborhood)KENSINGTON                      5.43e-02
## factor(neighborhood)MADISON                        -8.39e-02
## factor(neighborhood)MANHATTAN BEACH                -8.09e-05
## factor(neighborhood)MARINE PARK                    -2.63e-01
## factor(neighborhood)MIDWOOD                        -1.06e-01
## factor(neighborhood)MILL BASIN                     -2.14e-01
## factor(neighborhood)NAVY YARD                      -1.39e-01
## factor(neighborhood)OCEAN HILL                     -1.07e+00
## factor(neighborhood)OCEAN PARKWAY-NORTH            -1.55e-02
## factor(neighborhood)OCEAN PARKWAY-SOUTH             5.29e-02
## factor(neighborhood)OLD MILL BASIN                 -4.48e-01
## factor(neighborhood)PARK SLOPE                      9.67e-01
## factor(neighborhood)PARK SLOPE SOUTH                4.57e-01
```

```
## factor(neighborhood)PROSPECT HEIGHTS                              5.53e-01
## factor(neighborhood)RED HOOK                                      1.95e-01
## factor(neighborhood)SEAGATE                                      -5.31e-01
## factor(neighborhood)SHEEPSHEAD BAY                               -1.95e-01
## factor(neighborhood)SPRING CREEK                                 -5.12e-01
## factor(neighborhood)SUNSET PARK                                   4.45e-02
## factor(neighborhood)WILLIAMSBURG-CENTRAL                         -1.97e-01
## factor(neighborhood)WILLIAMSBURG-EAST                             3.42e-01
## factor(neighborhood)WILLIAMSBURG-NORTH                            8.24e-01
## factor(neighborhood)WILLIAMSBURG-SOUTH                            9.26e-02
## factor(neighborhood)WINDSOR TERRACE                               4.27e-01
## factor(neighborhood)WYCKOFF HEIGHTS                              -4.25e-01
## factor(building.class.category)02  TWO FAMILY HOMES             -5.96e-02
## factor(building.class.category)03  THREE FAMILY HOMES           -1.42e-01
##                                                                 Std. Error
## (Intercept)                                                      3.29e-01
## log(gross.sqft)                                                  3.49e-02
## log(land.sqft)                                                   3.48e-02
## factor(neighborhood)BAY RIDGE                                    9.75e-02
## factor(neighborhood)BEDFORD STUYVESANT                           8.81e-02
## factor(neighborhood)BENSONHURST                                  9.87e-02
## factor(neighborhood)BERGEN BEACH                                 1.37e-01
## factor(neighborhood)BOERUM HILL                                  1.62e-01
## factor(neighborhood)BOROUGH PARK                                 9.41e-02
## factor(neighborhood)BRIGHTON BEACH                               1.67e-01
## factor(neighborhood)BROOKLYN HEIGHTS                             1.98e-01
## factor(neighborhood)BROWNSVILLE                                  1.31e-01
## factor(neighborhood)BUSH TERMINAL                                3.35e-01
## factor(neighborhood)BUSHWICK                                     9.23e-02
## factor(neighborhood)CANARSIE                                     9.47e-02
## factor(neighborhood)CARROLL GARDENS                              1.60e-01
## factor(neighborhood)CLINTON HILL                                 1.44e-01
## factor(neighborhood)COBBLE HILL                                  2.01e-01
## factor(neighborhood)COBBLE HILL-WEST                             4.07e-01
## factor(neighborhood)CONEY ISLAND                                 2.10e-01
## factor(neighborhood)CROWN HEIGHTS                                9.71e-02
## factor(neighborhood)CYPRESS HILLS                                1.02e-01
## factor(neighborhood)DOWNTOWN-FULTON FERRY                        8.01e-01
## factor(neighborhood)DOWNTOWN-FULTON MALL                         4.68e-01
## factor(neighborhood)DOWNTOWN-METROTECH                           8.01e-01
## factor(neighborhood)DYKER HEIGHTS                                1.01e-01
## factor(neighborhood)EAST NEW YORK                                9.25e-02
## factor(neighborhood)FLATBUSH-CENTRAL                             1.07e-01
## factor(neighborhood)FLATBUSH-EAST                                9.58e-02
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN                     1.32e-01
## factor(neighborhood)FLATBUSH-NORTH                               1.22e-01
## factor(neighborhood)FLATLANDS                                    1.34e-01
## factor(neighborhood)FORT GREENE                                  1.48e-01
## factor(neighborhood)GERRITSEN BEACH                              1.41e-01
## factor(neighborhood)GOWANUS                                      1.47e-01
## factor(neighborhood)GRAVESEND                                    9.87e-02
## factor(neighborhood)GREENPOINT                                   1.29e-01
## factor(neighborhood)KENSINGTON                                   1.59e-01
## factor(neighborhood)MADISON                                      1.09e-01
```

```
## factor(neighborhood)MANHATTAN BEACH                                    1.64e-01
## factor(neighborhood)MARINE PARK                                        1.03e-01
## factor(neighborhood)MIDWOOD                                            1.02e-01
## factor(neighborhood)MILL BASIN                                         1.37e-01
## factor(neighborhood)NAVY YARD                                          2.66e-01
## factor(neighborhood)OCEAN HILL                                         9.89e-02
## factor(neighborhood)OCEAN PARKWAY-NORTH                                1.04e-01
## factor(neighborhood)OCEAN PARKWAY-SOUTH                                1.09e-01
## factor(neighborhood)OLD MILL BASIN                                     1.16e-01
## factor(neighborhood)PARK SLOPE                                         1.14e-01
## factor(neighborhood)PARK SLOPE SOUTH                                   1.38e-01
## factor(neighborhood)PROSPECT HEIGHTS                                   1.68e-01
## factor(neighborhood)RED HOOK                                           2.16e-01
## factor(neighborhood)SEAGATE                                            2.94e-01
## factor(neighborhood)SHEEPSHEAD BAY                                     1.03e-01
## factor(neighborhood)SPRING CREEK                                       1.53e-01
## factor(neighborhood)SUNSET PARK                                        1.00e-01
## factor(neighborhood)WILLIAMSBURG-CENTRAL                               2.10e-01
## factor(neighborhood)WILLIAMSBURG-EAST                                  1.38e-01
## factor(neighborhood)WILLIAMSBURG-NORTH                                 2.16e-01
## factor(neighborhood)WILLIAMSBURG-SOUTH                                 3.36e-01
## factor(neighborhood)WINDSOR TERRACE                                    1.38e-01
## factor(neighborhood)WYCKOFF HEIGHTS                                    1.82e-01
## factor(building.class.category)02  TWO FAMILY HOMES                    2.74e-02
## factor(building.class.category)03  THREE FAMILY HOMES                  3.80e-02
##                                                                        t value
## (Intercept)                                                             23.15
## log(gross.sqft)                                                         11.77
## log(land.sqft)                                                           9.97
## factor(neighborhood)BAY RIDGE                                            0.77
## factor(neighborhood)BEDFORD STUYVESANT                                  -6.34
## factor(neighborhood)BENSONHURST                                         -0.14
## factor(neighborhood)BERGEN BEACH                                        -1.64
## factor(neighborhood)BOERUM HILL                                          6.27
## factor(neighborhood)BOROUGH PARK                                         0.07
## factor(neighborhood)BRIGHTON BEACH                                      -5.11
## factor(neighborhood)BROOKLYN HEIGHTS                                     7.85
## factor(neighborhood)BROWNSVILLE                                         -6.36
## factor(neighborhood)BUSH TERMINAL                                       -0.45
## factor(neighborhood)BUSHWICK                                            -8.00
## factor(neighborhood)CANARSIE                                            -7.10
## factor(neighborhood)CARROLL GARDENS                                      6.04
## factor(neighborhood)CLINTON HILL                                         2.69
## factor(neighborhood)COBBLE HILL                                          6.32
## factor(neighborhood)COBBLE HILL-WEST                                     1.27
## factor(neighborhood)CONEY ISLAND                                        -2.60
## factor(neighborhood)CROWN HEIGHTS                                       -5.76
## factor(neighborhood)CYPRESS HILLS                                       -8.16
## factor(neighborhood)DOWNTOWN-FULTON FERRY                                0.53
## factor(neighborhood)DOWNTOWN-FULTON MALL                                 0.44
## factor(neighborhood)DOWNTOWN-METROTECH                                   1.73
## factor(neighborhood)DYKER HEIGHTS                                       -0.37
## factor(neighborhood)EAST NEW YORK                                      -10.70
## factor(neighborhood)FLATBUSH-CENTRAL                                    -4.94
```

```
## factor(neighborhood)FLATBUSH-EAST                              -6.18
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN                   -1.77
## factor(neighborhood)FLATBUSH-NORTH                             -6.96
## factor(neighborhood)FLATLANDS                                  -6.45
## factor(neighborhood)FORT GREENE                                 5.30
## factor(neighborhood)GERRITSEN BEACH                            -5.15
## factor(neighborhood)GOWANUS                                     3.91
## factor(neighborhood)GRAVESEND                                  -0.81
## factor(neighborhood)GREENPOINT                                  1.69
## factor(neighborhood)KENSINGTON                                  0.34
## factor(neighborhood)MADISON                                    -0.77
## factor(neighborhood)MANHATTAN BEACH                             0.00
## factor(neighborhood)MARINE PARK                                -2.56
## factor(neighborhood)MIDWOOD                                    -1.04
## factor(neighborhood)MILL BASIN                                 -1.56
## factor(neighborhood)NAVY YARD                                  -0.52
## factor(neighborhood)OCEAN HILL                                -10.84
## factor(neighborhood)OCEAN PARKWAY-NORTH                        -0.15
## factor(neighborhood)OCEAN PARKWAY-SOUTH                         0.49
## factor(neighborhood)OLD MILL BASIN                             -3.88
## factor(neighborhood)PARK SLOPE                                  8.45
## factor(neighborhood)PARK SLOPE SOUTH                            3.31
## factor(neighborhood)PROSPECT HEIGHTS                            3.30
## factor(neighborhood)RED HOOK                                    0.90
## factor(neighborhood)SEAGATE                                    -1.81
## factor(neighborhood)SHEEPSHEAD BAY                             -1.90
## factor(neighborhood)SPRING CREEK                               -3.34
## factor(neighborhood)SUNSET PARK                                 0.44
## factor(neighborhood)WILLIAMSBURG-CENTRAL                       -0.94
## factor(neighborhood)WILLIAMSBURG-EAST                           2.48
## factor(neighborhood)WILLIAMSBURG-NORTH                          3.82
## factor(neighborhood)WILLIAMSBURG-SOUTH                          0.28
## factor(neighborhood)WINDSOR TERRACE                             3.10
## factor(neighborhood)WYCKOFF HEIGHTS                            -2.33
## factor(building.class.category)02  TWO FAMILY HOMES            -2.18
## factor(building.class.category)03  THREE FAMILY HOMES          -3.73
##                                                               Pr(>|t|)
## (Intercept)                                                   < 2e-16
## log(gross.sqft)                                               < 2e-16
## log(land.sqft)                                                < 2e-16
## factor(neighborhood)BAY RIDGE                                 0.43981
## factor(neighborhood)BEDFORD STUYVESANT                        2.4e-10
## factor(neighborhood)BENSONHURST                               0.88649
## factor(neighborhood)BERGEN BEACH                              0.10162
## factor(neighborhood)BOERUM HILL                               3.9e-10
## factor(neighborhood)BOROUGH PARK                              0.94704
## factor(neighborhood)BRIGHTON BEACH                            3.4e-07
## factor(neighborhood)BROOKLYN HEIGHTS                          4.7e-15
## factor(neighborhood)BROWNSVILLE                               2.1e-10
## factor(neighborhood)BUSH TERMINAL                             0.65459
## factor(neighborhood)BUSHWICK                                  1.4e-15
## factor(neighborhood)CANARSIE                                  1.4e-12
## factor(neighborhood)CARROLL GARDENS                           1.6e-09
## factor(neighborhood)CLINTON HILL                              0.00708
```

```
## factor(neighborhood)COBBLE HILL                              2.9e-10
## factor(neighborhood)COBBLE HILL-WEST                         0.20296
## factor(neighborhood)CONEY ISLAND                             0.00938
## factor(neighborhood)CROWN HEIGHTS                            8.8e-09
## factor(neighborhood)CYPRESS HILLS                            3.9e-16
## factor(neighborhood)DOWNTOWN-FULTON FERRY                    0.59336
## factor(neighborhood)DOWNTOWN-FULTON MALL                     0.65969
## factor(neighborhood)DOWNTOWN-METROTECH                       0.08351
## factor(neighborhood)DYKER HEIGHTS                            0.71307
## factor(neighborhood)EAST NEW YORK                            < 2e-16
## factor(neighborhood)FLATBUSH-CENTRAL                         8.1e-07
## factor(neighborhood)FLATBUSH-EAST                            6.7e-10
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN                 0.07689
## factor(neighborhood)FLATBUSH-NORTH                           3.8e-12
## factor(neighborhood)FLATLANDS                                1.2e-10
## factor(neighborhood)FORT GREENE                              1.2e-07
## factor(neighborhood)GERRITSEN BEACH                          2.6e-07
## factor(neighborhood)GOWANUS                                  9.2e-05
## factor(neighborhood)GRAVESEND                                0.41827
## factor(neighborhood)GREENPOINT                               0.09175
## factor(neighborhood)KENSINGTON                               0.73313
## factor(neighborhood)MADISON                                  0.44041
## factor(neighborhood)MANHATTAN BEACH                          0.99961
## factor(neighborhood)MARINE PARK                              0.01056
## factor(neighborhood)MIDWOOD                                  0.30032
## factor(neighborhood)MILL BASIN                               0.11896
## factor(neighborhood)NAVY YARD                                0.60185
## factor(neighborhood)OCEAN HILL                               < 2e-16
## factor(neighborhood)OCEAN PARKWAY-NORTH                      0.88146
## factor(neighborhood)OCEAN PARKWAY-SOUTH                      0.62699
## factor(neighborhood)OLD MILL BASIN                           0.00011
## factor(neighborhood)PARK SLOPE                               < 2e-16
## factor(neighborhood)PARK SLOPE SOUTH                         0.00095
## factor(neighborhood)PROSPECT HEIGHTS                         0.00096
## factor(neighborhood)RED HOOK                                 0.36606
## factor(neighborhood)SEAGATE                                  0.07078
## factor(neighborhood)SHEEPSHEAD BAY                           0.05738
## factor(neighborhood)SPRING CREEK                             0.00083
## factor(neighborhood)SUNSET PARK                              0.65805
## factor(neighborhood)WILLIAMSBURG-CENTRAL                     0.34971
## factor(neighborhood)WILLIAMSBURG-EAST                        0.01304
## factor(neighborhood)WILLIAMSBURG-NORTH                       0.00013
## factor(neighborhood)WILLIAMSBURG-SOUTH                       0.78270
## factor(neighborhood)WINDSOR TERRACE                          0.00193
## factor(neighborhood)WYCKOFF HEIGHTS                          0.01971
## factor(building.class.category)02  TWO FAMILY HOMES          0.02945
## factor(building.class.category)03  THREE FAMILY HOMES        0.00019
##
## (Intercept)                                                  ***
## log(gross.sqft)                                              ***
## log(land.sqft)                                               ***
## factor(neighborhood)BAY RIDGE
## factor(neighborhood)BEDFORD STUYVESANT                       ***
## factor(neighborhood)BENSONHURST
```

```
## factor(neighborhood)BERGEN BEACH
## factor(neighborhood)BOERUM HILL                              ***
## factor(neighborhood)BOROUGH PARK
## factor(neighborhood)BRIGHTON BEACH                           ***
## factor(neighborhood)BROOKLYN HEIGHTS                         ***
## factor(neighborhood)BROWNSVILLE                              ***
## factor(neighborhood)BUSH TERMINAL
## factor(neighborhood)BUSHWICK                                 ***
## factor(neighborhood)CANARSIE                                 ***
## factor(neighborhood)CARROLL GARDENS                          ***
## factor(neighborhood)CLINTON HILL                             **
## factor(neighborhood)COBBLE HILL                              ***
## factor(neighborhood)COBBLE HILL-WEST
## factor(neighborhood)CONEY ISLAND                             **
## factor(neighborhood)CROWN HEIGHTS                            ***
## factor(neighborhood)CYPRESS HILLS                            ***
## factor(neighborhood)DOWNTOWN-FULTON FERRY
## factor(neighborhood)DOWNTOWN-FULTON MALL
## factor(neighborhood)DOWNTOWN-METROTECH                       .
## factor(neighborhood)DYKER HEIGHTS
## factor(neighborhood)EAST NEW YORK                            ***
## factor(neighborhood)FLATBUSH-CENTRAL                         ***
## factor(neighborhood)FLATBUSH-EAST                            ***
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN                 .
## factor(neighborhood)FLATBUSH-NORTH                           ***
## factor(neighborhood)FLATLANDS                                ***
## factor(neighborhood)FORT GREENE                              ***
## factor(neighborhood)GERRITSEN BEACH                          ***
## factor(neighborhood)GOWANUS                                  ***
## factor(neighborhood)GRAVESEND
## factor(neighborhood)GREENPOINT                               .
## factor(neighborhood)KENSINGTON
## factor(neighborhood)MADISON
## factor(neighborhood)MANHATTAN BEACH
## factor(neighborhood)MARINE PARK                              *
## factor(neighborhood)MIDWOOD
## factor(neighborhood)MILL BASIN
## factor(neighborhood)NAVY YARD
## factor(neighborhood)OCEAN HILL                               ***
## factor(neighborhood)OCEAN PARKWAY-NORTH
## factor(neighborhood)OCEAN PARKWAY-SOUTH
## factor(neighborhood)OLD MILL BASIN                           ***
## factor(neighborhood)PARK SLOPE                               ***
## factor(neighborhood)PARK SLOPE SOUTH                         ***
## factor(neighborhood)PROSPECT HEIGHTS                         ***
## factor(neighborhood)RED HOOK
## factor(neighborhood)SEAGATE                                  .
## factor(neighborhood)SHEEPSHEAD BAY                           .
## factor(neighborhood)SPRING CREEK                             ***
## factor(neighborhood)SUNSET PARK
## factor(neighborhood)WILLIAMSBURG-CENTRAL
## factor(neighborhood)WILLIAMSBURG-EAST                        *
## factor(neighborhood)WILLIAMSBURG-NORTH                       ***
## factor(neighborhood)WILLIAMSBURG-SOUTH
```

```
## factor(neighborhood)WINDSOR TERRACE                                    **
## factor(neighborhood)WYCKOFF HEIGHTS                                     *
## factor(building.class.category)02  TWO FAMILY HOMES                     *
## factor(building.class.category)03  THREE FAMILY HOMES                   ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.797 on 6335 degrees of freedom
## Multiple R-squared:  0.309,  Adjusted R-squared:  0.303
## F-statistic:    45 on 63 and 6335 DF,  p-value: <2e-16
```

```r
plot(resid(model3))
```
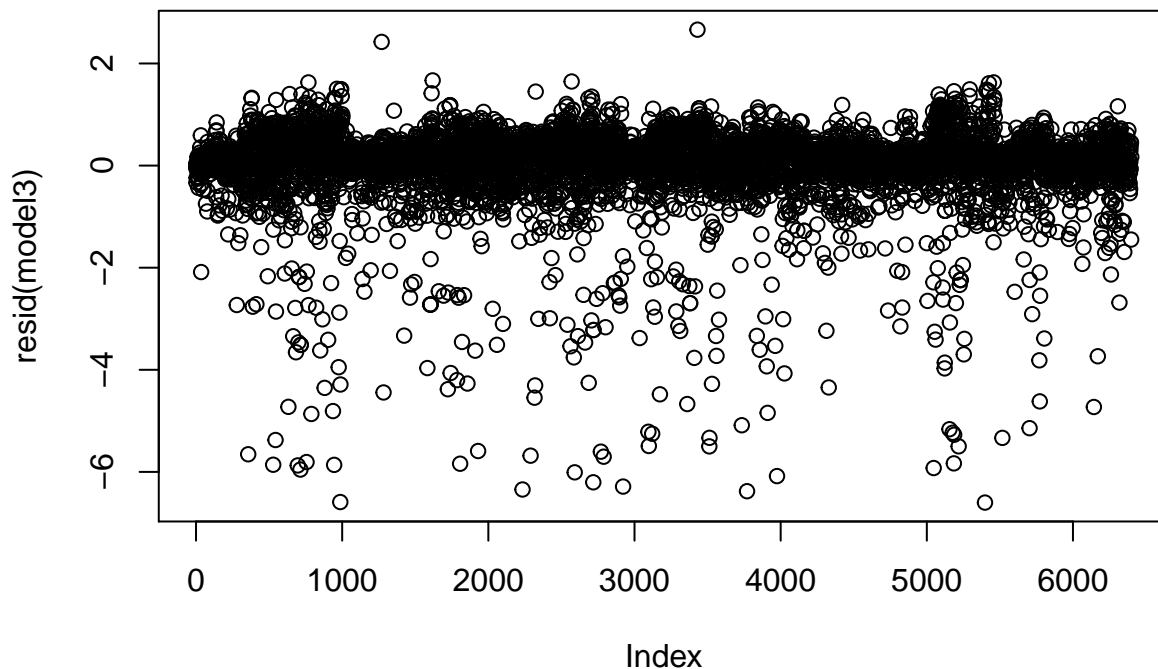


```
# Residual standard error: 0.7966 on 6335 degrees of freedom
# Multiple R-squared:  0.3094,  Adjusted R-squared:  0.3025
# F-statistic: 45.04 on 63 and 6335 DF,  p-value: < 2.2e-16

# interact neighborhood and building type
model4 <- lm(log(sale.price.n) ~ log(gross.sqft) +
             log(land.sqft) + factor(neighborhood) *
             factor(building.class.category),data=bk.homes)
summary(model4)
```

```
##
## Call:
## lm(formula = log(sale.price.n) ~ log(gross.sqft) + log(land.sqft) +
##     factor(neighborhood) * factor(building.class.category), data = bk.homes)
##
## Residuals:
##    Min     1Q Median     3Q    Max
## -6.615 -0.128  0.112  0.347  2.609
```

```
##
## Coefficients: (9 not defined because of singularities)
##
## (Intercept)
## log(gross.sqft)
## log(land.sqft)
## factor(neighborhood)BAY RIDGE
## factor(neighborhood)BEDFORD STUYVESANT
## factor(neighborhood)BENSONHURST
## factor(neighborhood)BERGEN BEACH
## factor(neighborhood)BOERUM HILL
## factor(neighborhood)BOROUGH PARK
## factor(neighborhood)BRIGHTON BEACH
## factor(neighborhood)BROOKLYN HEIGHTS
## factor(neighborhood)BROWNSVILLE
## factor(neighborhood)BUSH TERMINAL
## factor(neighborhood)BUSHWICK
## factor(neighborhood)CANARSIE
## factor(neighborhood)CARROLL GARDENS
## factor(neighborhood)CLINTON HILL
## factor(neighborhood)COBBLE HILL
## factor(neighborhood)COBBLE HILL-WEST
## factor(neighborhood)CONEY ISLAND
## factor(neighborhood)CROWN HEIGHTS
## factor(neighborhood)CYPRESS HILLS
## factor(neighborhood)DOWNTOWN-FULTON FERRY
## factor(neighborhood)DOWNTOWN-FULTON MALL
## factor(neighborhood)DOWNTOWN-METROTECH
## factor(neighborhood)DYKER HEIGHTS
## factor(neighborhood)EAST NEW YORK
## factor(neighborhood)FLATBUSH-CENTRAL
## factor(neighborhood)FLATBUSH-EAST
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN
## factor(neighborhood)FLATBUSH-NORTH
## factor(neighborhood)FLATLANDS
## factor(neighborhood)FORT GREENE
## factor(neighborhood)GERRITSEN BEACH
## factor(neighborhood)GOWANUS
## factor(neighborhood)GRAVESEND
## factor(neighborhood)GREENPOINT
## factor(neighborhood)KENSINGTON
## factor(neighborhood)MADISON
## factor(neighborhood)MANHATTAN BEACH
## factor(neighborhood)MARINE PARK
## factor(neighborhood)MIDWOOD
## factor(neighborhood)MILL BASIN
## factor(neighborhood)NAVY YARD
## factor(neighborhood)OCEAN HILL
## factor(neighborhood)OCEAN PARKWAY-NORTH
## factor(neighborhood)OCEAN PARKWAY-SOUTH
## factor(neighborhood)OLD MILL BASIN
## factor(neighborhood)PARK SLOPE
## factor(neighborhood)PARK SLOPE SOUTH
## factor(neighborhood)PROSPECT HEIGHTS
```

```
## factor(neighborhood)RED HOOK
## factor(neighborhood)SEAGATE
## factor(neighborhood)SHEEPSHEAD BAY
## factor(neighborhood)SPRING CREEK
## factor(neighborhood)SUNSET PARK
## factor(neighborhood)WILLIAMSBURG-CENTRAL
## factor(neighborhood)WILLIAMSBURG-EAST
## factor(neighborhood)WILLIAMSBURG-NORTH
## factor(neighborhood)WILLIAMSBURG-SOUTH
## factor(neighborhood)WINDSOR TERRACE
## factor(neighborhood)WYCKOFF HEIGHTS
## factor(building.class.category)02  TWO FAMILY HOMES
## factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BAY RIDGE                 :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BEDFORD STUYVESANT        :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BENSONHURST               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BERGEN BEACH              :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BOERUM HILL               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BOROUGH PARK              :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BRIGHTON BEACH            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BROOKLYN HEIGHTS          :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BROWNSVILLE               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BUSH TERMINAL             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BUSHWICK                  :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CANARSIE                  :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CARROLL GARDENS           :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CLINTON HILL              :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)COBBLE HILL               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)COBBLE HILL-WEST          :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CONEY ISLAND              :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CROWN HEIGHTS             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CYPRESS HILLS             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)DOWNTOWN-FULTON FERRY     :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)DOWNTOWN-FULTON MALL      :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)DOWNTOWN-METROTECH        :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)DYKER HEIGHTS             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)EAST NEW YORK             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATBUSH-CENTRAL          :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATBUSH-EAST             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN  :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATBUSH-NORTH            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATLANDS                 :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FORT GREENE               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)GERRITSEN BEACH           :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)GOWANUS                   :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)GRAVESEND                 :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)GREENPOINT                :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)KENSINGTON                :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MADISON                   :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MANHATTAN BEACH           :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MARINE PARK               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MIDWOOD                   :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MILL BASIN                :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)NAVY YARD                 :factor(building.class.category)02  TWO FAMILY HOMES
```

```
## factor(neighborhood)OCEAN HILL               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)OCEAN PARKWAY-NORTH      :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)OCEAN PARKWAY-SOUTH      :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)OLD MILL BASIN           :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)PARK SLOPE               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)PARK SLOPE SOUTH         :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)PROSPECT HEIGHTS         :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)RED HOOK                 :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)SEAGATE                  :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)SHEEPSHEAD BAY           :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)SPRING CREEK             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)SUNSET PARK              :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-CENTRAL     :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-EAST        :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-NORTH       :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-SOUTH       :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WINDSOR TERRACE          :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WYCKOFF HEIGHTS          :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BAY RIDGE                :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BEDFORD STUYVESANT       :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BENSONHURST              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BERGEN BEACH             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BOERUM HILL              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BOROUGH PARK             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BRIGHTON BEACH           :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BROOKLYN HEIGHTS         :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BROWNSVILLE              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BUSH TERMINAL            :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BUSHWICK                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CANARSIE                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CARROLL GARDENS          :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CLINTON HILL             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)COBBLE HILL              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)COBBLE HILL-WEST         :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CONEY ISLAND             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CROWN HEIGHTS            :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CYPRESS HILLS            :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)DOWNTOWN-FULTON FERRY    :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)DOWNTOWN-FULTON MALL     :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)DOWNTOWN-METROTECH       :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)DYKER HEIGHTS            :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)EAST NEW YORK            :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATBUSH-CENTRAL         :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATBUSH-EAST            :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATBUSH-NORTH           :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATLANDS                :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FORT GREENE              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)GERRITSEN BEACH          :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)GOWANUS                  :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)GRAVESEND                :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)GREENPOINT               :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)KENSINGTON               :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MADISON                  :factor(building.class.category)03  THREE FAMILY HOMES
```

```
## factor(neighborhood)MANHATTAN BEACH         :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MARINE PARK             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MIDWOOD                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MILL BASIN              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)NAVY YARD               :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)OCEAN HILL              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)OCEAN PARKWAY-NORTH     :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)OCEAN PARKWAY-SOUTH     :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)OLD MILL BASIN          :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)PARK SLOPE              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)PARK SLOPE SOUTH        :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)PROSPECT HEIGHTS        :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)RED HOOK                :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)SEAGATE                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)SHEEPSHEAD BAY          :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)SPRING CREEK            :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)SUNSET PARK             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-CENTRAL    :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-EAST       :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-NORTH      :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-SOUTH      :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WINDSOR TERRACE         :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WYCKOFF HEIGHTS         :factor(building.class.category)03  THREE FAMILY HOMES
##
## (Intercept)
## log(gross.sqft)
## log(land.sqft)
## factor(neighborhood)BAY RIDGE
## factor(neighborhood)BEDFORD STUYVESANT
## factor(neighborhood)BENSONHURST
## factor(neighborhood)BERGEN BEACH
## factor(neighborhood)BOERUM HILL
## factor(neighborhood)BOROUGH PARK
## factor(neighborhood)BRIGHTON BEACH
## factor(neighborhood)BROOKLYN HEIGHTS
## factor(neighborhood)BROWNSVILLE
## factor(neighborhood)BUSH TERMINAL
## factor(neighborhood)BUSHWICK
## factor(neighborhood)CANARSIE
## factor(neighborhood)CARROLL GARDENS
## factor(neighborhood)CLINTON HILL
## factor(neighborhood)COBBLE HILL
## factor(neighborhood)COBBLE HILL-WEST
## factor(neighborhood)CONEY ISLAND
## factor(neighborhood)CROWN HEIGHTS
## factor(neighborhood)CYPRESS HILLS
## factor(neighborhood)DOWNTOWN-FULTON FERRY
## factor(neighborhood)DOWNTOWN-FULTON MALL
## factor(neighborhood)DOWNTOWN-METROTECH
## factor(neighborhood)DYKER HEIGHTS
## factor(neighborhood)EAST NEW YORK
## factor(neighborhood)FLATBUSH-CENTRAL
## factor(neighborhood)FLATBUSH-EAST
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN
```

```
## factor(neighborhood)FLATBUSH-NORTH
## factor(neighborhood)FLATLANDS
## factor(neighborhood)FORT GREENE
## factor(neighborhood)GERRITSEN BEACH
## factor(neighborhood)GOWANUS
## factor(neighborhood)GRAVESEND
## factor(neighborhood)GREENPOINT
## factor(neighborhood)KENSINGTON
## factor(neighborhood)MADISON
## factor(neighborhood)MANHATTAN BEACH
## factor(neighborhood)MARINE PARK
## factor(neighborhood)MIDWOOD
## factor(neighborhood)MILL BASIN
## factor(neighborhood)NAVY YARD
## factor(neighborhood)OCEAN HILL
## factor(neighborhood)OCEAN PARKWAY-NORTH
## factor(neighborhood)OCEAN PARKWAY-SOUTH
## factor(neighborhood)OLD MILL BASIN
## factor(neighborhood)PARK SLOPE
## factor(neighborhood)PARK SLOPE SOUTH
## factor(neighborhood)PROSPECT HEIGHTS
## factor(neighborhood)RED HOOK
## factor(neighborhood)SEAGATE
## factor(neighborhood)SHEEPSHEAD BAY
## factor(neighborhood)SPRING CREEK
## factor(neighborhood)SUNSET PARK
## factor(neighborhood)WILLIAMSBURG-CENTRAL
## factor(neighborhood)WILLIAMSBURG-EAST
## factor(neighborhood)WILLIAMSBURG-NORTH
## factor(neighborhood)WILLIAMSBURG-SOUTH
## factor(neighborhood)WINDSOR TERRACE
## factor(neighborhood)WYCKOFF HEIGHTS
## factor(building.class.category)02  TWO FAMILY HOMES
## factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BAY RIDGE                :factor(building.class.category)02 TWO FAMILY HOMES
## factor(neighborhood)BEDFORD STUYVESANT       :factor(building.class.category)02 TWO FAMILY HOMES
## factor(neighborhood)BENSONHURST              :factor(building.class.category)02 TWO FAMILY HOMES
## factor(neighborhood)BERGEN BEACH             :factor(building.class.category)02 TWO FAMILY HOMES
## factor(neighborhood)BOERUM HILL              :factor(building.class.category)02 TWO FAMILY HOMES
## factor(neighborhood)BOROUGH PARK             :factor(building.class.category)02 TWO FAMILY HOMES
## factor(neighborhood)BRIGHTON BEACH           :factor(building.class.category)02 TWO FAMILY HOMES
## factor(neighborhood)BROOKLYN HEIGHTS         :factor(building.class.category)02 TWO FAMILY HOMES
## factor(neighborhood)BROWNSVILLE              :factor(building.class.category)02 TWO FAMILY HOMES
## factor(neighborhood)BUSH TERMINAL            :factor(building.class.category)02 TWO FAMILY HOMES
## factor(neighborhood)BUSHWICK                 :factor(building.class.category)02 TWO FAMILY HOMES
## factor(neighborhood)CANARSIE                 :factor(building.class.category)02 TWO FAMILY HOMES
## factor(neighborhood)CARROLL GARDENS          :factor(building.class.category)02 TWO FAMILY HOMES
## factor(neighborhood)CLINTON HILL             :factor(building.class.category)02 TWO FAMILY HOMES
## factor(neighborhood)COBBLE HILL              :factor(building.class.category)02 TWO FAMILY HOMES
## factor(neighborhood)COBBLE HILL-WEST         :factor(building.class.category)02 TWO FAMILY HOMES
## factor(neighborhood)CONEY ISLAND             :factor(building.class.category)02 TWO FAMILY HOMES
## factor(neighborhood)CROWN HEIGHTS            :factor(building.class.category)02 TWO FAMILY HOMES
## factor(neighborhood)CYPRESS HILLS            :factor(building.class.category)02 TWO FAMILY HOMES
## factor(neighborhood)DOWNTOWN-FULTON FERRY    :factor(building.class.category)02 TWO FAMILY HOMES
```

```
## factor(neighborhood)DOWNTOWN-FULTON MALL   :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)DOWNTOWN-METROTECH     :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)DYKER HEIGHTS          :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)EAST NEW YORK          :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATBUSH-CENTRAL       :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATBUSH-EAST          :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATBUSH-NORTH         :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATLANDS             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FORT GREENE           :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)GERRITSEN BEACH        :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)GOWANUS               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)GRAVESEND             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)GREENPOINT            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)KENSINGTON            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MADISON               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MANHATTAN BEACH        :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MARINE PARK           :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MIDWOOD               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MILL BASIN            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)NAVY YARD             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)OCEAN HILL            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)OCEAN PARKWAY-NORTH    :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)OCEAN PARKWAY-SOUTH    :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)OLD MILL BASIN        :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)PARK SLOPE            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)PARK SLOPE SOUTH       :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)PROSPECT HEIGHTS       :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)RED HOOK              :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)SEAGATE               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)SHEEPSHEAD BAY         :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)SPRING CREEK          :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)SUNSET PARK           :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-CENTRAL   :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-EAST      :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-NORTH     :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-SOUTH     :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WINDSOR TERRACE        :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WYCKOFF HEIGHTS        :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BAY RIDGE             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BEDFORD STUYVESANT     :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BENSONHURST           :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BERGEN BEACH          :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BOERUM HILL           :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BOROUGH PARK          :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BRIGHTON BEACH        :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BROOKLYN HEIGHTS       :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BROWNSVILLE           :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BUSH TERMINAL          :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BUSHWICK              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CANARSIE              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CARROLL GARDENS        :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CLINTON HILL          :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)COBBLE HILL           :factor(building.class.category)03  THREE FAMILY HOMES
```

```
## factor(neighborhood)COBBLE HILL-WEST           :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CONEY ISLAND               :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CROWN HEIGHTS              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CYPRESS HILLS              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)DOWNTOWN-FULTON FERRY      :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)DOWNTOWN-FULTON MALL       :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)DOWNTOWN-METROTECH         :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)DYKER HEIGHTS              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)EAST NEW YORK              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATBUSH-CENTRAL           :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATBUSH-EAST              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATBUSH-NORTH             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATLANDS                  :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FORT GREENE                :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)GERRITSEN BEACH            :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)GOWANUS                    :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)GRAVESEND                  :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)GREENPOINT                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)KENSINGTON                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MADISON                    :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MANHATTAN BEACH            :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MARINE PARK                :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MIDWOOD                    :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MILL BASIN                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)NAVY YARD                  :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)OCEAN HILL                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)OCEAN PARKWAY-NORTH        :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)OCEAN PARKWAY-SOUTH        :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)OLD MILL BASIN             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)PARK SLOPE                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)PARK SLOPE SOUTH           :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)PROSPECT HEIGHTS           :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)RED HOOK                   :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)SEAGATE                    :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)SHEEPSHEAD BAY             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)SPRING CREEK               :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)SUNSET PARK                :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-CENTRAL       :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-EAST          :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-NORTH         :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-SOUTH         :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WINDSOR TERRACE            :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WYCKOFF HEIGHTS            :factor(building.class.category)03  THREE FAMILY HOMES
##
## (Intercept)
## log(gross.sqft)
## log(land.sqft)
## factor(neighborhood)BAY RIDGE
## factor(neighborhood)BEDFORD STUYVESANT
## factor(neighborhood)BENSONHURST
## factor(neighborhood)BERGEN BEACH
## factor(neighborhood)BOERUM HILL
## factor(neighborhood)BOROUGH PARK
```

```
## factor(neighborhood)BRIGHTON BEACH
## factor(neighborhood)BROOKLYN HEIGHTS
## factor(neighborhood)BROWNSVILLE
## factor(neighborhood)BUSH TERMINAL
## factor(neighborhood)BUSHWICK
## factor(neighborhood)CANARSIE
## factor(neighborhood)CARROLL GARDENS
## factor(neighborhood)CLINTON HILL
## factor(neighborhood)COBBLE HILL
## factor(neighborhood)COBBLE HILL-WEST
## factor(neighborhood)CONEY ISLAND
## factor(neighborhood)CROWN HEIGHTS
## factor(neighborhood)CYPRESS HILLS
## factor(neighborhood)DOWNTOWN-FULTON FERRY
## factor(neighborhood)DOWNTOWN-FULTON MALL
## factor(neighborhood)DOWNTOWN-METROTECH
## factor(neighborhood)DYKER HEIGHTS
## factor(neighborhood)EAST NEW YORK
## factor(neighborhood)FLATBUSH-CENTRAL
## factor(neighborhood)FLATBUSH-EAST
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN
## factor(neighborhood)FLATBUSH-NORTH
## factor(neighborhood)FLATLANDS
## factor(neighborhood)FORT GREENE
## factor(neighborhood)GERRITSEN BEACH
## factor(neighborhood)GOWANUS
## factor(neighborhood)GRAVESEND
## factor(neighborhood)GREENPOINT
## factor(neighborhood)KENSINGTON
## factor(neighborhood)MADISON
## factor(neighborhood)MANHATTAN BEACH
## factor(neighborhood)MARINE PARK
## factor(neighborhood)MIDWOOD
## factor(neighborhood)MILL BASIN
## factor(neighborhood)NAVY YARD
## factor(neighborhood)OCEAN HILL
## factor(neighborhood)OCEAN PARKWAY-NORTH
## factor(neighborhood)OCEAN PARKWAY-SOUTH
## factor(neighborhood)OLD MILL BASIN
## factor(neighborhood)PARK SLOPE
## factor(neighborhood)PARK SLOPE SOUTH
## factor(neighborhood)PROSPECT HEIGHTS
## factor(neighborhood)RED HOOK
## factor(neighborhood)SEAGATE
## factor(neighborhood)SHEEPSHEAD BAY
## factor(neighborhood)SPRING CREEK
## factor(neighborhood)SUNSET PARK
## factor(neighborhood)WILLIAMSBURG-CENTRAL
## factor(neighborhood)WILLIAMSBURG-EAST
## factor(neighborhood)WILLIAMSBURG-NORTH
## factor(neighborhood)WILLIAMSBURG-SOUTH
## factor(neighborhood)WINDSOR TERRACE
## factor(neighborhood)WYCKOFF HEIGHTS
## factor(building.class.category)02  TWO FAMILY HOMES
```

```
## factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BAY RIDGE                   :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BEDFORD STUYVESANT          :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BENSONHURST                 :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BERGEN BEACH                :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BOERUM HILL                 :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BOROUGH PARK                :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BRIGHTON BEACH              :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BROOKLYN HEIGHTS            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BROWNSVILLE                 :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BUSH TERMINAL               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BUSHWICK                    :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CANARSIE                    :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CARROLL GARDENS             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CLINTON HILL                :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)COBBLE HILL                 :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)COBBLE HILL-WEST            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CONEY ISLAND                :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CROWN HEIGHTS               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CYPRESS HILLS               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)DOWNTOWN-FULTON FERRY       :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)DOWNTOWN-FULTON MALL        :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)DOWNTOWN-METROTECH          :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)DYKER HEIGHTS               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)EAST NEW YORK               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATBUSH-CENTRAL            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATBUSH-EAST               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN    :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATBUSH-NORTH              :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATLANDS                   :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FORT GREENE                 :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)GERRITSEN BEACH             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)GOWANUS                     :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)GRAVESEND                   :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)GREENPOINT                  :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)KENSINGTON                  :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MADISON                     :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MANHATTAN BEACH             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MARINE PARK                 :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MIDWOOD                     :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MILL BASIN                  :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)NAVY YARD                   :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)OCEAN HILL                  :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)OCEAN PARKWAY-NORTH         :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)OCEAN PARKWAY-SOUTH         :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)OLD MILL BASIN              :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)PARK SLOPE                  :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)PARK SLOPE SOUTH            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)PROSPECT HEIGHTS            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)RED HOOK                    :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)SEAGATE                     :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)SHEEPSHEAD BAY              :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)SPRING CREEK                :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)SUNSET PARK                 :factor(building.class.category)02  TWO FAMILY HOMES
```

```
## factor(neighborhood)WILLIAMSBURG-CENTRAL       :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-EAST          :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-NORTH         :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-SOUTH         :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WINDSOR TERRACE            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WYCKOFF HEIGHTS            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BAY RIDGE                  :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BEDFORD STUYVESANT         :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BENSONHURST                :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BERGEN BEACH               :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BOERUM HILL                :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BOROUGH PARK               :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BRIGHTON BEACH             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BROOKLYN HEIGHTS           :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BROWNSVILLE                :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BUSH TERMINAL              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BUSHWICK                   :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CANARSIE                   :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CARROLL GARDENS            :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CLINTON HILL               :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)COBBLE HILL                :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)COBBLE HILL-WEST           :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CONEY ISLAND               :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CROWN HEIGHTS              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CYPRESS HILLS              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)DOWNTOWN-FULTON FERRY      :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)DOWNTOWN-FULTON MALL       :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)DOWNTOWN-METROTECH         :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)DYKER HEIGHTS              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)EAST NEW YORK              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATBUSH-CENTRAL           :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATBUSH-EAST              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN   :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATBUSH-NORTH             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATLANDS                  :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FORT GREENE                :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)GERRITSEN BEACH            :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)GOWANUS                    :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)GRAVESEND                  :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)GREENPOINT                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)KENSINGTON                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MADISON                    :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MANHATTAN BEACH            :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MARINE PARK                :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MIDWOOD                    :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MILL BASIN                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)NAVY YARD                  :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)OCEAN HILL                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)OCEAN PARKWAY-NORTH        :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)OCEAN PARKWAY-SOUTH        :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)OLD MILL BASIN             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)PARK SLOPE                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)PARK SLOPE SOUTH           :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)PROSPECT HEIGHTS           :factor(building.class.category)03  THREE FAMILY HOMES
```

```
## factor(neighborhood)RED HOOK                  :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)SEAGATE                   :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)SHEEPSHEAD BAY            :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)SPRING CREEK              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)SUNSET PARK               :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-CENTRAL      :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-EAST         :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-NORTH        :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-SOUTH        :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WINDSOR TERRACE           :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WYCKOFF HEIGHTS           :factor(building.class.category)03  THREE FAMILY HOMES
##
## (Intercept)
## log(gross.sqft)
## log(land.sqft)
## factor(neighborhood)BAY RIDGE
## factor(neighborhood)BEDFORD STUYVESANT
## factor(neighborhood)BENSONHURST
## factor(neighborhood)BERGEN BEACH
## factor(neighborhood)BOERUM HILL
## factor(neighborhood)BOROUGH PARK
## factor(neighborhood)BRIGHTON BEACH
## factor(neighborhood)BROOKLYN HEIGHTS
## factor(neighborhood)BROWNSVILLE
## factor(neighborhood)BUSH TERMINAL
## factor(neighborhood)BUSHWICK
## factor(neighborhood)CANARSIE
## factor(neighborhood)CARROLL GARDENS
## factor(neighborhood)CLINTON HILL
## factor(neighborhood)COBBLE HILL
## factor(neighborhood)COBBLE HILL-WEST
## factor(neighborhood)CONEY ISLAND
## factor(neighborhood)CROWN HEIGHTS
## factor(neighborhood)CYPRESS HILLS
## factor(neighborhood)DOWNTOWN-FULTON FERRY
## factor(neighborhood)DOWNTOWN-FULTON MALL
## factor(neighborhood)DOWNTOWN-METROTECH
## factor(neighborhood)DYKER HEIGHTS
## factor(neighborhood)EAST NEW YORK
## factor(neighborhood)FLATBUSH-CENTRAL
## factor(neighborhood)FLATBUSH-EAST
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN
## factor(neighborhood)FLATBUSH-NORTH
## factor(neighborhood)FLATLANDS
## factor(neighborhood)FORT GREENE
## factor(neighborhood)GERRITSEN BEACH
## factor(neighborhood)GOWANUS
## factor(neighborhood)GRAVESEND
## factor(neighborhood)GREENPOINT
## factor(neighborhood)KENSINGTON
## factor(neighborhood)MADISON
## factor(neighborhood)MANHATTAN BEACH
## factor(neighborhood)MARINE PARK
## factor(neighborhood)MIDWOOD
```

```
## factor(neighborhood)MILL BASIN
## factor(neighborhood)NAVY YARD
## factor(neighborhood)OCEAN HILL
## factor(neighborhood)OCEAN PARKWAY-NORTH
## factor(neighborhood)OCEAN PARKWAY-SOUTH
## factor(neighborhood)OLD MILL BASIN
## factor(neighborhood)PARK SLOPE
## factor(neighborhood)PARK SLOPE SOUTH
## factor(neighborhood)PROSPECT HEIGHTS
## factor(neighborhood)RED HOOK
## factor(neighborhood)SEAGATE
## factor(neighborhood)SHEEPSHEAD BAY
## factor(neighborhood)SPRING CREEK
## factor(neighborhood)SUNSET PARK
## factor(neighborhood)WILLIAMSBURG-CENTRAL
## factor(neighborhood)WILLIAMSBURG-EAST
## factor(neighborhood)WILLIAMSBURG-NORTH
## factor(neighborhood)WILLIAMSBURG-SOUTH
## factor(neighborhood)WINDSOR TERRACE
## factor(neighborhood)WYCKOFF HEIGHTS
## factor(building.class.category)02  TWO FAMILY HOMES
## factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BAY RIDGE              :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BEDFORD STUYVESANT     :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BENSONHURST            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BERGEN BEACH           :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BOERUM HILL            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BOROUGH PARK           :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BRIGHTON BEACH         :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BROOKLYN HEIGHTS       :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BROWNSVILLE            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BUSH TERMINAL          :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BUSHWICK               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CANARSIE               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CARROLL GARDENS        :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CLINTON HILL           :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)COBBLE HILL            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)COBBLE HILL-WEST       :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CONEY ISLAND           :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CROWN HEIGHTS          :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CYPRESS HILLS          :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)DOWNTOWN-FULTON FERRY  :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)DOWNTOWN-FULTON MALL   :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)DOWNTOWN-METROTECH     :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)DYKER HEIGHTS          :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)EAST NEW YORK          :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATBUSH-CENTRAL       :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATBUSH-EAST          :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATBUSH-NORTH         :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATLANDS              :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FORT GREENE            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)GERRITSEN BEACH        :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)GOWANUS                :factor(building.class.category)02  TWO FAMILY HOMES
```

```
## factor(neighborhood)GRAVESEND                     :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)GREENPOINT                    :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)KENSINGTON                     :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MADISON                        :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MANHATTAN BEACH                :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MARINE PARK                    :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MIDWOOD                        :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MILL BASIN                     :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)NAVY YARD                      :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)OCEAN HILL                     :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)OCEAN PARKWAY-NORTH            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)OCEAN PARKWAY-SOUTH            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)OLD MILL BASIN                 :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)PARK SLOPE                     :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)PARK SLOPE SOUTH               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)PROSPECT HEIGHTS               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)RED HOOK                       :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)SEAGATE                        :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)SHEEPSHEAD BAY                 :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)SPRING CREEK                   :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)SUNSET PARK                    :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-CENTRAL           :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-EAST              :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-NORTH             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-SOUTH             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WINDSOR TERRACE                :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WYCKOFF HEIGHTS                :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BAY RIDGE                      :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BEDFORD STUYVESANT             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BENSONHURST                    :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BERGEN BEACH                   :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BOERUM HILL                    :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BOROUGH PARK                   :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BRIGHTON BEACH                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BROOKLYN HEIGHTS               :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BROWNSVILLE                    :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BUSH TERMINAL                  :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BUSHWICK                       :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CANARSIE                       :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CARROLL GARDENS                :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CLINTON HILL                   :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)COBBLE HILL                    :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)COBBLE HILL-WEST               :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CONEY ISLAND                   :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CROWN HEIGHTS                  :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CYPRESS HILLS                  :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)DOWNTOWN-FULTON FERRY          :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)DOWNTOWN-FULTON MALL           :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)DOWNTOWN-METROTECH             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)DYKER HEIGHTS                  :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)EAST NEW YORK                  :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATBUSH-CENTRAL               :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATBUSH-EAST                  :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN :factor(building.class.category)03  THREE FAMILY HOMES
```

```
## factor(neighborhood)FLATBUSH-NORTH          :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATLANDS               :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FORT GREENE             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)GERRITSEN BEACH         :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)GOWANUS                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)GRAVESEND               :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)GREENPOINT              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)KENSINGTON              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MADISON                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MANHATTAN BEACH         :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MARINE PARK             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MIDWOOD                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MILL BASIN              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)NAVY YARD               :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)OCEAN HILL              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)OCEAN PARKWAY-NORTH     :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)OCEAN PARKWAY-SOUTH     :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)OLD MILL BASIN          :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)PARK SLOPE              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)PARK SLOPE SOUTH        :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)PROSPECT HEIGHTS        :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)RED HOOK                :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)SEAGATE                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)SHEEPSHEAD BAY          :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)SPRING CREEK            :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)SUNSET PARK             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-CENTRAL    :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-EAST       :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-NORTH      :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-SOUTH      :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WINDSOR TERRACE         :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WYCKOFF HEIGHTS         :factor(building.class.category)03  THREE FAMILY HOMES
##
## (Intercept)
## log(gross.sqft)
## log(land.sqft)
## factor(neighborhood)BAY RIDGE
## factor(neighborhood)BEDFORD STUYVESANT
## factor(neighborhood)BENSONHURST
## factor(neighborhood)BERGEN BEACH
## factor(neighborhood)BOERUM HILL
## factor(neighborhood)BOROUGH PARK
## factor(neighborhood)BRIGHTON BEACH
## factor(neighborhood)BROOKLYN HEIGHTS
## factor(neighborhood)BROWNSVILLE
## factor(neighborhood)BUSH TERMINAL
## factor(neighborhood)BUSHWICK
## factor(neighborhood)CANARSIE
## factor(neighborhood)CARROLL GARDENS
## factor(neighborhood)CLINTON HILL
## factor(neighborhood)COBBLE HILL
## factor(neighborhood)COBBLE HILL-WEST
## factor(neighborhood)CONEY ISLAND
## factor(neighborhood)CROWN HEIGHTS
```

```
## factor(neighborhood)CYPRESS HILLS
## factor(neighborhood)DOWNTOWN-FULTON FERRY
## factor(neighborhood)DOWNTOWN-FULTON MALL
## factor(neighborhood)DOWNTOWN-METROTECH
## factor(neighborhood)DYKER HEIGHTS
## factor(neighborhood)EAST NEW YORK
## factor(neighborhood)FLATBUSH-CENTRAL
## factor(neighborhood)FLATBUSH-EAST
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN
## factor(neighborhood)FLATBUSH-NORTH
## factor(neighborhood)FLATLANDS
## factor(neighborhood)FORT GREENE
## factor(neighborhood)GERRITSEN BEACH
## factor(neighborhood)GOWANUS
## factor(neighborhood)GRAVESEND
## factor(neighborhood)GREENPOINT
## factor(neighborhood)KENSINGTON
## factor(neighborhood)MADISON
## factor(neighborhood)MANHATTAN BEACH
## factor(neighborhood)MARINE PARK
## factor(neighborhood)MIDWOOD
## factor(neighborhood)MILL BASIN
## factor(neighborhood)NAVY YARD
## factor(neighborhood)OCEAN HILL
## factor(neighborhood)OCEAN PARKWAY-NORTH
## factor(neighborhood)OCEAN PARKWAY-SOUTH
## factor(neighborhood)OLD MILL BASIN
## factor(neighborhood)PARK SLOPE
## factor(neighborhood)PARK SLOPE SOUTH
## factor(neighborhood)PROSPECT HEIGHTS
## factor(neighborhood)RED HOOK
## factor(neighborhood)SEAGATE
## factor(neighborhood)SHEEPSHEAD BAY
## factor(neighborhood)SPRING CREEK
## factor(neighborhood)SUNSET PARK
## factor(neighborhood)WILLIAMSBURG-CENTRAL
## factor(neighborhood)WILLIAMSBURG-EAST
## factor(neighborhood)WILLIAMSBURG-NORTH
## factor(neighborhood)WILLIAMSBURG-SOUTH
## factor(neighborhood)WINDSOR TERRACE
## factor(neighborhood)WYCKOFF HEIGHTS
## factor(building.class.category)02  TWO FAMILY HOMES
## factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BAY RIDGE               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BEDFORD STUYVESANT      :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BENSONHURST             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BERGEN BEACH            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BOERUM HILL             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BOROUGH PARK            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BRIGHTON BEACH          :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BROOKLYN HEIGHTS        :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BROWNSVILLE             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BUSH TERMINAL           :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BUSHWICK                :factor(building.class.category)02  TWO FAMILY HOMES
```

```
## factor(neighborhood)CANARSIE                    :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CARROLL GARDENS             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CLINTON HILL                :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)COBBLE HILL                 :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)COBBLE HILL-WEST            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CONEY ISLAND                :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CROWN HEIGHTS               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)CYPRESS HILLS               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)DOWNTOWN-FULTON FERRY       :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)DOWNTOWN-FULTON MALL        :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)DOWNTOWN-METROTECH          :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)DYKER HEIGHTS               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)EAST NEW YORK               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATBUSH-CENTRAL            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATBUSH-EAST               :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATBUSH-NORTH              :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FLATLANDS                   :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)FORT GREENE                 :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)GERRITSEN BEACH             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)GOWANUS                     :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)GRAVESEND                   :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)GREENPOINT                  :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)KENSINGTON                  :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MADISON                     :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MANHATTAN BEACH             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MARINE PARK                 :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MIDWOOD                     :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)MILL BASIN                  :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)NAVY YARD                   :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)OCEAN HILL                  :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)OCEAN PARKWAY-NORTH         :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)OCEAN PARKWAY-SOUTH         :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)OLD MILL BASIN              :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)PARK SLOPE                  :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)PARK SLOPE SOUTH            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)PROSPECT HEIGHTS            :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)RED HOOK                    :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)SEAGATE                     :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)SHEEPSHEAD BAY              :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)SPRING CREEK                :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)SUNSET PARK                 :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-CENTRAL        :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-EAST           :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-NORTH          :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-SOUTH          :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WINDSOR TERRACE             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)WYCKOFF HEIGHTS             :factor(building.class.category)02  TWO FAMILY HOMES
## factor(neighborhood)BAY RIDGE                   :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BEDFORD STUYVESANT          :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BENSONHURST                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BERGEN BEACH                :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BOERUM HILL                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BOROUGH PARK                :factor(building.class.category)03  THREE FAMILY HOMES
```

```
## factor(neighborhood)BRIGHTON BEACH          :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BROOKLYN HEIGHTS        :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BROWNSVILLE             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BUSH TERMINAL           :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)BUSHWICK                :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CANARSIE                :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CARROLL GARDENS         :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CLINTON HILL            :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)COBBLE HILL             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)COBBLE HILL-WEST        :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CONEY ISLAND            :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CROWN HEIGHTS           :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)CYPRESS HILLS           :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)DOWNTOWN-FULTON FERRY   :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)DOWNTOWN-FULTON MALL    :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)DOWNTOWN-METROTECH      :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)DYKER HEIGHTS           :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)EAST NEW YORK           :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATBUSH-CENTRAL        :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATBUSH-EAST           :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATBUSH-LEFFERTS GARDEN :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATBUSH-NORTH          :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FLATLANDS               :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)FORT GREENE             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)GERRITSEN BEACH         :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)GOWANUS                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)GRAVESEND               :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)GREENPOINT              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)KENSINGTON              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MADISON                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MANHATTAN BEACH         :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MARINE PARK             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MIDWOOD                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)MILL BASIN              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)NAVY YARD               :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)OCEAN HILL              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)OCEAN PARKWAY-NORTH     :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)OCEAN PARKWAY-SOUTH     :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)OLD MILL BASIN          :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)PARK SLOPE              :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)PARK SLOPE SOUTH        :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)PROSPECT HEIGHTS        :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)RED HOOK                :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)SEAGATE                 :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)SHEEPSHEAD BAY          :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)SPRING CREEK            :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)SUNSET PARK             :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-CENTRAL    :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-EAST       :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-NORTH      :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WILLIAMSBURG-SOUTH      :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WINDSOR TERRACE         :factor(building.class.category)03  THREE FAMILY HOMES
## factor(neighborhood)WYCKOFF HEIGHTS         :factor(building.class.category)03  THREE FAMILY HOMES
## ---
```

```
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.791 on 6226 degrees of freedom
## Multiple R-squared:  0.33,   Adjusted R-squared:  0.311
## F-statistic: 17.8 on 172 and 6226 DF,  p-value: <2e-16
```

```r
plot(resid(model4))
```
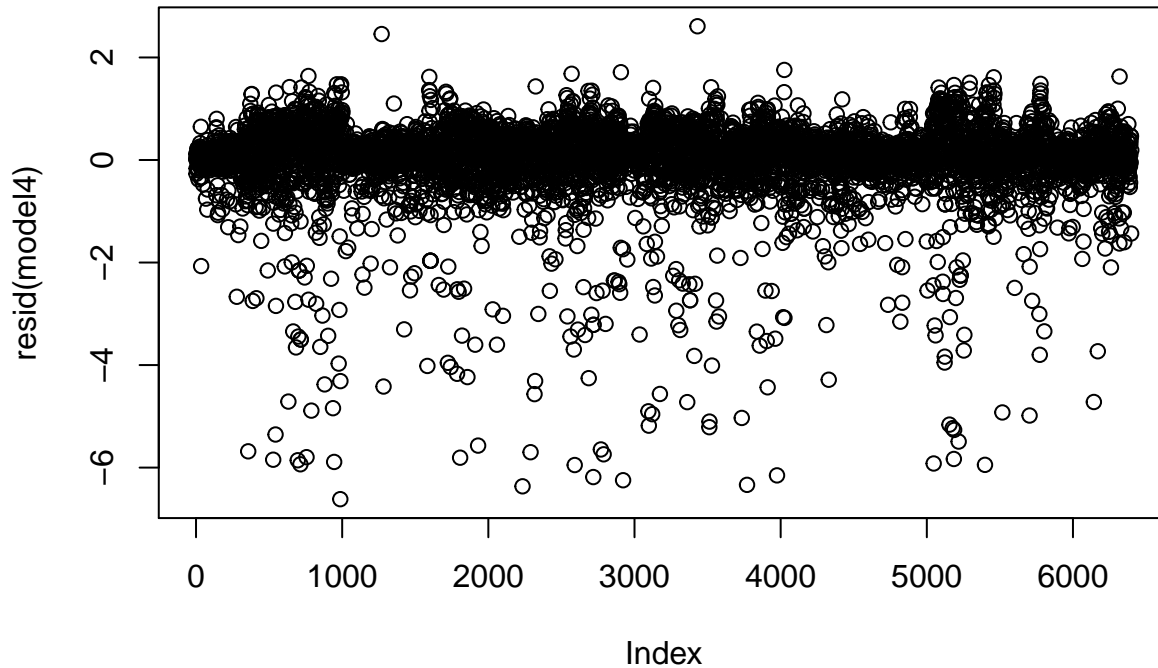


```
# Residual standard error: 0.7914 on 6226 degrees of freedom
# Multiple R-squared:  0.3299,  Adjusted R-squared:  0.3114
# F-statistic: 17.82 on 172 and 6226 DF,  p-value: < 2.2e-16
```