# With columns containing absorption data:

## Linear regg.(least squares):

R-squared score (training): 1.000

R-squared score (test): 1.000

coeff:

open\_stock\_units 8190.0

tsw\_new\_units\_<=30 1878.0

tsw\_new\_units\_30-40 1450.0

tsw\_new\_units\_80-90 1140.0

tsw\_new\_units\_40-50 825.0

tsw\_new\_units\_50-60 490.0

tsw\_new\_units\_>1 457.0

tsw\_new\_units\_60-70 380.0

tsw\_new\_units\_70-80 346.0

tsw\_new\_units\_90-1 196.0

## Ridge regg:

R-squared score (training): 1.000

R-squared score (test): 1.000

Coeff:

open\_stock\_units 8190.000000

tsw\_new\_units\_<=30 1878.000000

tsw\_new\_units\_30-40 1450.000000

tsw\_new\_units\_80-90 1140.000000

tsw\_new\_units\_40-50 825.000000

TOT\_M 692.444604

ava\_radio 686.958045

MAINWORK\_F 626.455874

MARGWORK\_0\_3\_P 556.789668

F\_06 520.269698

## Lasso regg:

R-squared score (training): 0.986

R-squared score (test): 0.989

Coeff:

tsw\_ta\_units\_<=30 570.550671

tsw\_ta\_units\_30-40 430.051811

tsw\_ta\_units\_40-50 347.434709

tsw\_ta\_units\_50-60 177.681951

tsw\_ta\_units\_60-70 170.377771

tsw\_ta\_units\_>1 91.274596

tsw\_ta\_mnsqft\_>1 80.182129

tsw\_ta\_units\_70-80 76.135085

tsw\_ta\_units\_90-1 50.098914

Unsold in Mn Sqft 34.920817

## RandomForests:

Accuracy of RF regressor on training set: 0.98

Accuracy of RF regressor on test set: 0.95

Importance:

tsw\_ta\_units\_30-40 2.685258e-01

tsw\_ta\_units\_<=30 1.764821e-01

Unsold in units 1.126874e-01

tsw\_ta\_mnsqft\_30-40 1.001515e-01

tsw\_ta\_units\_40-50 6.370734e-02

tsw\_ta\_mnsqft\_40-50 4.238355e-02

tsw\_ta\_mnsqft\_<=30 2.776838e-02

open\_stock\_units 2.192824e-02

New Launch Absorption in Units 2.014126e-02

tsw\_ta\_mnsqft\_50-60 1.755004e-02

New Launch Absorption in Mn Sqft 1.680096e-02

## 

## GradientBoost:

Accuracy of GBDT regressor on training set: 0.99

Accuracy of GBDT regressor on test set: 0.97

Importance:

tsw\_ta\_units\_30-40 0.290155

tsw\_ta\_units\_<=30 0.217236

tsw\_ta\_units\_40-50 0.132046

New Launch Absorption in Units 0.085108

Unsold in units 0.063455

Unsold in Mn Sqft 0.046598

tsw\_ta\_units\_50-60 0.028389

tsw\_ta\_mnsqft\_50-60 0.018355

tsw\_ta\_mnsqft\_30-40 0.018171

tsw\_ta\_units\_60-70 0.016372

# Without columns containing absorption data:

## Linear regg.(least squares):

R-squared score (training): 1.000

R-squared score (test): 1.000

Coeff:

open\_stock\_units 8190.0

tsw\_new\_units\_<=30 1878.0

tsw\_new\_units\_30-40 1450.0

tsw\_new\_units\_80-90 1140.0

tsw\_new\_units\_40-50 825.0

tsw\_new\_units\_50-60 490.0

tsw\_new\_units\_>1 457.0

tsw\_new\_units\_60-70 380.0

tsw\_new\_units\_70-80 346.0

tsw\_new\_units\_90-1 196.0

## Ridge regg:

R-squared score (training): 1.000

R-squared score (test): 1.000

Coeff:

open\_stock\_units 8190.000000

tsw\_new\_units\_<=30 1878.000000

tsw\_new\_units\_30-40 1450.000000

tsw\_new\_units\_80-90 1140.000000

tsw\_new\_units\_40-50 825.000000

TOT\_M 692.444604

ava\_radio 686.958045

MAINWORK\_F 626.455874

MARGWORK\_0\_3\_P 556.789668

F\_06 520.269698

## Lasso regg:

R-squared score (training): 0.809

R-squared score (test): 0.715

Coeff:

New Launch Absorption in Mn Sqft 491.016831

new\_abs\_units\_<=30 380.366949

new\_abs\_units\_30-40 235.960447

open\_stock\_units 163.469241

open\_stock\_mnsqft 108.388150

new\_abs\_units\_50-60 103.668194

new\_abs\_units\_40-50 57.298097

tsw\_new\_units\_40-50 48.676922

new\_abs\_units\_>1 24.994508

tsw\_new\_units\_<=30 17.055616

## RandomForests:

Accuracy of RF regressor on training set: 0.97

Accuracy of RF regressor on test set: 0.83

Unsold in units 0.269705

New Launch Absorption in Units 0.224073

open\_stock\_units 0.088443

overhang 0.079043

New Launch Absorption in Mn Sqft 0.049753

Unsold in Mn Sqft 0.048259

new\_abs\_mnsqft\_<=30 0.022640

open\_stock\_mnsqft 0.018437

new\_abs\_mnsqft\_30-40 0.016733

new\_abs\_units\_<=30 0.014302

## GradientBoost:

Accuracy of GBDT regressor on training set: 0.94

Accuracy of GBDT regressor on test set: 0.83

Coeff:

New Launch Absorption in Units 0.328870

Unsold in units 0.185723

open\_stock\_units 0.138407

overhang 0.106998

Unsold in Mn Sqft 0.105722

New Launch Absorption in Mn Sqft 0.037252

open\_stock\_mnsqft 0.020242

new\_abs\_units\_30-40 0.011767

new\_abs\_mnsqft\_<=30 0.011110

tsw\_un\_mnsqft\_>1 0.007020