

1k

AdaBoost	Regressor_train	R^2	score: 0.610
AdaBoost	Regressor_valid	R^2	score: 0.535
AdaBoost	Regressor_train	RMSE	score: 0.180
AdaBoost	Regressor_valid	RMSE	score: 0.197

5k

AdaBoost	Regressor_train	R^2	score: 0.469
AdaBoost	Regressor_valid	R^2	score: 0.464
AdaBoost	Regressor_train	RMSE	score: 0.213
AdaBoost	Regressor_valid	RMSE	score: 0.211

10k

AdaBoost	Regressor_train	R^2	score: 0.501
AdaBoost	Regressor_valid	R^2	score: 0.495
AdaBoost	Regressor_train	RMSE	score: 0.205
AdaBoost	Regressor_valid	RMSE	score: 0.205

15k

AdaBoost	Regressor_train	R^2	score: 0.501
AdaBoost	Regressor_valid	R^2	score: 0.492
AdaBoost	Regressor_train	RMSE	score: 0.204
AdaBoost	Regressor_valid	RMSE	score: 0.206

20k

AdaBoost	Regressor_train	R^2	score: 0.588
AdaBoost	Regressor_valid	R^2	score: 0.581
AdaBoost	Regressor_train	RMSE	score: 0.186
AdaBoost	Regressor_valid	RMSE	score: 0.188

25k

AdaBoost	Regressor_train	R^2	score: 0.585
AdaBoost	Regressor_valid	R^2	score: 0.582
AdaBoost	Regressor_train	RMSE	score: 0.186
AdaBoost	Regressor_valid	RMSE	score: 0.187

30k

AdaBoost	Regressor_train	R^2	score: 0.579
AdaBoost	Regressor_valid	R^2	score: 0.579
AdaBoost	Regressor_train	RMSE	score: 0.188
AdaBoost	Regressor_valid	RMSE	score: 0.187

35k

AdaBoost	Regressor_train	R^2	score: 0.477
AdaBoost	Regressor_valid	R^2	score: 0.471
AdaBoost	Regressor_train	RMSE	score: 0.209
AdaBoost	Regressor_valid	RMSE	score: 0.212

40k

AdaBoost Regressor\_train R<sup>2</sup> score: 0.514  
AdaBoost Regressor\_valid R<sup>2</sup> score: 0.507  
AdaBoost Regressor\_train RMSE score: 0.201  
AdaBoost Regressor\_valid RMSE score: 0.204

45k

AdaBoost Regressor\_train R<sup>2</sup> score: 0.576  
AdaBoost Regressor\_valid R<sup>2</sup> score: 0.570  
AdaBoost Regressor\_train RMSE score: 0.188  
AdaBoost Regressor\_valid RMSE score: 0.191

50k

AdaBoost Regressor\_train R<sup>2</sup> score: 0.578  
AdaBoost Regressor\_valid R<sup>2</sup> score: 0.571  
AdaBoost Regressor\_train RMSE score: 0.187  
AdaBoost Regressor\_valid RMSE score: 0.190

1k

KNeighborsRegressor\_train R<sup>2</sup> score: 1.000  
KNeighborsRegressor\_valid R<sup>2</sup> score: 0.960  
KNeighborsRegressor\_train RMSE score: 0.000  
KNeighborsRegressor\_valid RMSE score: 0.058

5k

KNeighborsRegressor\_train R<sup>2</sup> score: 1.000  
KNeighborsRegressor\_valid R<sup>2</sup> score: 0.992  
KNeighborsRegressor\_train RMSE score: 0.000  
KNeighborsRegressor\_valid RMSE score: 0.026

10k

KNeighborsRegressor\_train R<sup>2</sup> score: 1.000  
KNeighborsRegressor\_valid R<sup>2</sup> score: 0.996  
KNeighborsRegressor\_train RMSE score: 0.000  
KNeighborsRegressor\_valid RMSE score: 0.019

15k

KNeighborsRegressor\_train R<sup>2</sup> score: 1.000  
KNeighborsRegressor\_valid R<sup>2</sup> score: 0.997  
KNeighborsRegressor\_train RMSE score: 0.000  
KNeighborsRegressor\_valid RMSE score: 0.015

20k

KNeighborsRegressor\_train R<sup>2</sup> score: 1.000  
KNeighborsRegressor\_valid R<sup>2</sup> score: 0.998  
KNeighborsRegressor\_train RMSE score: 0.000  
KNeighborsRegressor\_valid RMSE score: 0.013

25k

KNeighborsRegressor\_train R<sup>2</sup> score: 1.000  
KNeighborsRegressor\_valid R<sup>2</sup> score: 0.998  
KNeighborsRegressor\_train RMSE score: 0.000  
KNeighborsRegressor\_valid RMSE score: 0.012

30k

KNeighborsRegressor\_train R<sup>2</sup> score: 1.000  
KNeighborsRegressor\_valid R<sup>2</sup> score: 0.999  
KNeighborsRegressor\_train RMSE score: 0.000  
KNeighborsRegressor\_valid RMSE score: 0.011

35k

KNeighborsRegressor\_train R<sup>2</sup> score: 1.000  
KNeighborsRegressor\_valid R<sup>2</sup> score: 0.999  
KNeighborsRegressor\_train RMSE score: 0.000  
KNeighborsRegressor\_valid RMSE score: 0.010

40k

KNeighborsRegressor\_train R<sup>2</sup> score: 1.000  
KNeighborsRegressor\_valid R<sup>2</sup> score: 0.999  
KNeighborsRegressor\_train RMSE score: 0.000  
KNeighborsRegressor\_valid RMSE score: 0.010

45k

KNeighborsRegressor\_train R<sup>2</sup> score: 1.000  
KNeighborsRegressor\_valid R<sup>2</sup> score: 0.999  
KNeighborsRegressor\_train RMSE score: 0.000  
KNeighborsRegressor\_valid RMSE score: 0.009

50k

KNeighborsRegressor\_train R<sup>2</sup> score: 1.000  
KNeighborsRegressor\_valid R<sup>2</sup> score: 0.999  
KNeighborsRegressor\_train RMSE score: 0.000  
KNeighborsRegressor\_valid RMSE score: 0.009

1k

GradientBoostingRegressor R<sup>2</sup> score: 1.000  
GradientBoostingRegressor R<sup>2</sup> score: 0.961  
GradientBoostingRegressor RMSE score: 0.005  
GradientBoostingRegressor RMSE score: 0.057

5k

GradientBoostingRegressor R<sup>2</sup> score: 1.000

GradientBoostingRegressor R<sup>2</sup> score: 0.988  
GradientBoostingRegressor RMSE score: 0.005  
GradientBoostingRegressor RMSE score: 0.032

10k

GradientBoostingRegressor R<sup>2</sup> score: 1.000  
GradientBoostingRegressor R<sup>2</sup> score: 0.994  
GradientBoostingRegressor RMSE score: 0.006  
GradientBoostingRegressor RMSE score: 0.022

15k

GradientBoostingRegressor R<sup>2</sup> score: 1.000  
GradientBoostingRegressor R<sup>2</sup> score: 0.996  
GradientBoostingRegressor RMSE score: 0.006  
GradientBoostingRegressor RMSE score: 0.019

20k

GradientBoostingRegressor R<sup>2</sup> score: 1.000  
GradientBoostingRegressor R<sup>2</sup> score: 0.997  
GradientBoostingRegressor RMSE score: 0.005  
GradientBoostingRegressor RMSE score: 0.017

25k

GradientBoostingRegressor R<sup>2</sup> score: 1.000  
GradientBoostingRegressor R<sup>2</sup> score: 0.997  
GradientBoostingRegressor RMSE score: 0.006  
GradientBoostingRegressor RMSE score: 0.016

30k

GradientBoostingRegressor R<sup>2</sup> score: 1.000  
GradientBoostingRegressor R<sup>2</sup> score: 0.997  
GradientBoostingRegressor RMSE score: 0.006  
GradientBoostingRegressor RMSE score: 0.015

35k

GradientBoostingRegressor R<sup>2</sup> score: 1.000  
GradientBoostingRegressor R<sup>2</sup> score: 0.998  
GradientBoostingRegressor RMSE score: 0.006  
GradientBoostingRegressor RMSE score: 0.014

40k

GradientBoostingRegressor R<sup>2</sup> score: 1.000  
GradientBoostingRegressor R<sup>2</sup> score: 0.998  
GradientBoostingRegressor RMSE score: 0.006  
GradientBoostingRegressor RMSE score: 0.014

45k

GradientBoostingRegressor R<sup>2</sup> score: 1.000

GradientBoostingRegressor R<sup>2</sup> score: 0.998  
GradientBoostingRegressor RMSE score: 0.006  
GradientBoostingRegressor RMSE score: 0.013

50k

GradientBoostingRegressor R<sup>2</sup> score: 0.999  
GradientBoostingRegressor R<sup>2</sup> score: 0.998  
GradientBoostingRegressor RMSE score: 0.007  
GradientBoostingRegressor RMSE score: 0.013

1k

Linear Regression train r2: 0.937  
Linear Regression test r2: 0.939  
Linear Regression train RMSE: 0.072  
Linear Regression test RMSE: 0.071

5k

Linear Regression train r2: 0.939  
Linear Regression test r2: 0.939  
Linear Regression train RMSE: 0.072  
Linear Regression test RMSE: 0.071

10k

Linear Regression train r2: 0.937  
Linear Regression test r2: 0.942  
Linear Regression train RMSE: 0.072  
Linear Regression test RMSE: 0.070

15k

Linear Regression train r2: 0.938  
Linear Regression test r2: 0.939  
Linear Regression train RMSE: 0.072  
Linear Regression test RMSE: 0.071

20k

Linear Regression train r2: 0.939  
Linear Regression test r2: 0.937  
Linear Regression train RMSE: 0.072  
Linear Regression test RMSE: 0.073

25k

Linear Regression train r2: 0.938  
Linear Regression test r2: 0.939  
Linear Regression train RMSE: 0.072  
Linear Regression test RMSE: 0.072

30k

Linear Regression train r2: 0.939  
Linear Regression test r2: 0.938  
Linear Regression train RMSE: 0.072  
Linear Regression test RMSE: 0.072

35k

Linear Regression train r2: 0.939  
Linear Regression test r2: 0.938  
Linear Regression train RMSE: 0.072  
Linear Regression test RMSE: 0.072

40k

Linear Regression train r2: 0.938  
Linear Regression test r2: 0.940  
Linear Regression train RMSE: 0.072  
Linear Regression test RMSE: 0.071

45k

Linear Regression train r2: 0.938  
Linear Regression test r2: 0.939  
Linear Regression train RMSE: 0.072  
Linear Regression test RMSE: 0.072

50k

Linear Regression train r2: 0.939  
Linear Regression test r2: 0.939  
Linear Regression train RMSE: 0.071  
Linear Regression test RMSE: 0.072

1k

RandomForestRegressor\_train R<sup>2</sup> score: 0.976  
RandomForestRegressor\_valid R<sup>2</sup> score: 0.937  
RandomForestRegressor\_train RMSE score: 0.045  
RandomForestRegressor\_valid RMSE score: 0.072

5k

RandomForestRegressor\_train R<sup>2</sup> score: 0.994  
RandomForestRegressor\_valid R<sup>2</sup> score: 0.983  
RandomForestRegressor\_train RMSE score: 0.023  
RandomForestRegressor\_valid RMSE score: 0.038

10k

RandomForestRegressor\_train R<sup>2</sup> score: 0.996  
RandomForestRegressor\_valid R<sup>2</sup> score: 0.990  
RandomForestRegressor\_train RMSE score: 0.017  
RandomForestRegressor\_valid RMSE score: 0.029

15k

RandomForestRegressor\_train R<sup>2</sup> score: 0.997  
RandomForestRegressor\_valid R<sup>2</sup> score: 0.992  
RandomForestRegressor\_train RMSE score: 0.017  
RandomForestRegressor\_valid RMSE score: 0.026

20k

RandomForestRegressor\_train R<sup>2</sup> score: 0.997  
RandomForestRegressor\_valid R<sup>2</sup> score: 0.994  
RandomForestRegressor\_train RMSE score: 0.016  
RandomForestRegressor\_valid RMSE score: 0.023

25k

RandomForestRegressor\_train R<sup>2</sup> score: 0.997  
RandomForestRegressor\_valid R<sup>2</sup> score: 0.994  
RandomForestRegressor\_train RMSE score: 0.016  
RandomForestRegressor\_valid RMSE score: 0.021

30k

RandomForestRegressor\_train R<sup>2</sup> score: 0.997  
RandomForestRegressor\_valid R<sup>2</sup> score: 0.995  
RandomForestRegressor\_train RMSE score: 0.016  
RandomForestRegressor\_valid RMSE score: 0.021

35k

RandomForestRegressor\_train R<sup>2</sup> score: 0.997  
RandomForestRegressor\_valid R<sup>2</sup> score: 0.995  
RandomForestRegressor\_train RMSE score: 0.017  
RandomForestRegressor\_valid RMSE score: 0.021

40k

RandomForestRegressor\_train R<sup>2</sup> score: 0.997  
RandomForestRegressor\_valid R<sup>2</sup> score: 0.995  
RandomForestRegressor\_train RMSE score: 0.016  
RandomForestRegressor\_valid RMSE score: 0.020

45k

RandomForestRegressor\_train R<sup>2</sup> score: 0.997  
RandomForestRegressor\_valid R<sup>2</sup> score: 0.995  
RandomForestRegressor\_train RMSE score: 0.016  
RandomForestRegressor\_valid RMSE score: 0.020

50k

RandomForestRegressor\_train R<sup>2</sup> score: 0.997  
RandomForestRegressor\_valid R<sup>2</sup> score: 0.996

RandomForestRegressor\_train RMSE score: 0.015  
RandomForestRegressor\_valid RMSE score: 0.019

1k

DecisionTreeRegressor\_train R<sup>2</sup> score: 0.971  
DecisionTreeRegressor\_valid R<sup>2</sup> score: 0.731  
DecisionTreeRegressor\_train RMSE score: 0.191  
DecisionTreeRegressor\_valid RMSE score: 0.572

5k

DecisionTreeRegressor\_train R<sup>2</sup> score: 0.942  
DecisionTreeRegressor\_valid R<sup>2</sup> score: 0.866  
DecisionTreeRegressor\_train RMSE score: 0.271  
DecisionTreeRegressor\_valid RMSE score: 0.407

10k

DecisionTreeRegressor\_train R<sup>2</sup> score: 0.961  
DecisionTreeRegressor\_valid R<sup>2</sup> score: 0.896  
DecisionTreeRegressor\_train RMSE score: 0.220  
DecisionTreeRegressor\_valid RMSE score: 0.362

15k

DecisionTreeRegressor\_train R<sup>2</sup> score: 0.964  
DecisionTreeRegressor\_valid R<sup>2</sup> score: 0.926  
DecisionTreeRegressor\_train RMSE score: 0.211  
DecisionTreeRegressor\_valid RMSE score: 0.307

20k

DecisionTreeRegressor\_train R<sup>2</sup> score: 0.961  
DecisionTreeRegressor\_valid R<sup>2</sup> score: 0.930  
DecisionTreeRegressor\_train RMSE score: 0.220  
DecisionTreeRegressor\_valid RMSE score: 0.299

25k

DecisionTreeRegressor\_train R<sup>2</sup> score: 0.961  
DecisionTreeRegressor\_valid R<sup>2</sup> score: 0.926  
DecisionTreeRegressor\_train RMSE score: 0.221  
DecisionTreeRegressor\_valid RMSE score: 0.306

30k

DecisionTreeRegressor\_train R<sup>2</sup> score: 0.959  
DecisionTreeRegressor\_valid R<sup>2</sup> score: 0.932  
DecisionTreeRegressor\_train RMSE score: 0.226  
DecisionTreeRegressor\_valid RMSE score: 0.291

35k

DecisionTreeRegressor\_train R<sup>2</sup> score: 0.945  
DecisionTreeRegressor\_valid R<sup>2</sup> score: 0.923  
DecisionTreeRegressor\_train RMSE score: 0.261  
DecisionTreeRegressor\_valid RMSE score: 0.313

40k

DecisionTreeRegressor\_train R<sup>2</sup> score: 0.941  
DecisionTreeRegressor\_valid R<sup>2</sup> score: 0.920



DecisionTreeRegressor\_train RMSE score: 0.272  
DecisionTreeRegressor\_valid RMSE score: 0.318

45k

DecisionTreeRegressor\_train  $R^2$  score: 0.952  
DecisionTreeRegressor\_valid  $R^2$  score: 0.929  
DecisionTreeRegressor\_train RMSE score: 0.245  
DecisionTreeRegressor\_valid RMSE score: 0.299

50k

DecisionTreeRegressor\_train  $R^2$  score: 0.953  
DecisionTreeRegressor\_valid  $R^2$  score: 0.934  
DecisionTreeRegressor\_train RMSE score: 0.241  
DecisionTreeRegressor\_valid RMSE score: 0.289