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Last login: Mon May 22 18:38:03 on ttys000
WL-24-146:~ E$ cd Desktop/hw2_starter_files
WL-24-146:hw2_starter_files E$ python3 hw2pr3.py
==> Loading data...
hw2pr3.py:382: FutureWarning: reshape is deprecated and will raise in a subsequent release. Please use .values.reshape(...) instead
  y_train = np.log(df[df.type == 'train'].shares).reshape((-1, 1))
hw2pr3.py:387: FutureWarning: reshape is deprecated and will raise in a subsequent release. Please use .values.reshape(...) instead
  y_val = np.log(df[df.type == 'val'].shares).reshape((-1, 1))
hw2pr3.py:392: FutureWarning: reshape is deprecated and will raise in a subsequent release. Please use .values.reshape(...) instead
  y_test = np.log(df[df.type == 'test'].shares).reshape((-1, 1))
==> Step 1: RMSE vs lambda...
==> Plotting completed.
==> The optimal regularization parameter is 8.2158.
==> The RMSE on the validation set with the optimal regularization parameter is 0.8341.
==> The RMSE on the test set with the optimal regularization parameter is 0.8628.

==> Step 2: Norm vs lambda...
==> Plotting completed.

==> Step 3: Linear regression without bias...
--Time elapsed for training: 165.84 seconds
==> Difference in bias is 4.5092E-10
==> Difference in weights is 6.0000E-10

==> Step 4: Gradient descent
==> Running gradient descent...
-- Iteration25 - training rmse 4.1057 - gradient norm 3.6435E+04
-- Iteration50 - training rmse 5.3716 - gradient norm 2.4237E+04
-- Iteration75 - training rmse 6.1941 - gradient norm 1.5202E+04
-- Iteration100 - training rmse 6.7031 - gradient norm 9.7337E+03
-- Iteration125 - training rmse 7.0146 - gradient norm 6.3025E+03
-- Iteration150 - training rmse 7.2046 - gradient norm 4.1295E+03
--Time elapsed for training: 86.83 seconds
==> Plotting completed.
==> Difference in bias is 1.5388E-01
(59, 1) (59, 1)
==> Difference in weights is 8.0483E-01
WL-24-146:hw2_starter_files E$

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