**Hour dataset**

I’ve created correlation plot of all variables to check correlation between them and exclude variables which are correlated between each other and with dependent variable (cnt).

A close up of text on a white background

Description automatically generated

Considering results of this plot I exclude from model variables “registered”, “casual” and “atemp” to avoid collinearity. Leave variable “temp” because it’s more significant than “atemp” according to summary table.

A close up of a green screen

Description automatically generated

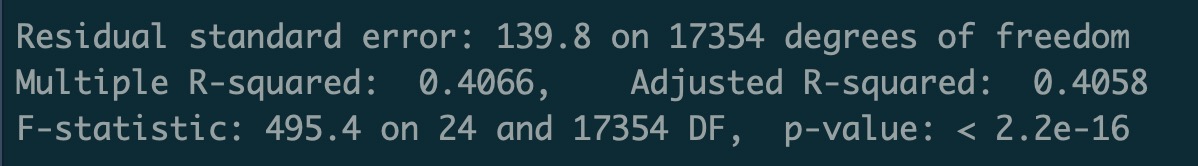
Excluding “workingday” because it’s insignificant

Model after excluding variables:

A picture containing device

Description automatically generated

Result of the model:

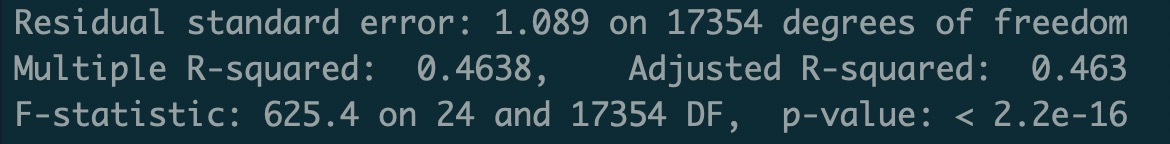


Building non-linear model:

A picture containing object

Description automatically generated

Result of the model:­



Considering R-squared in this dataset – non-linear model preforms better.

**Day dataset**

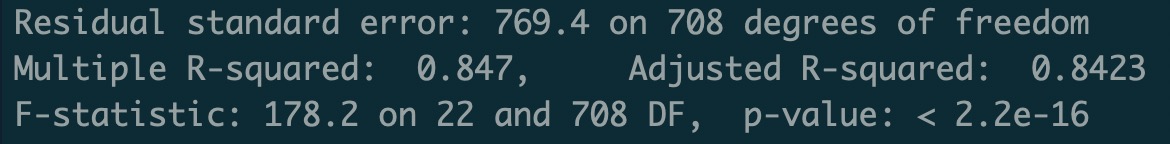
After making the same operations with this dataset I’ve got such models:

model after excluding variables:

A picture containing gauge, device

Description automatically generated

Result of the model:



Building non-linear model:

A picture containing device, gauge

Description automatically generated

Result of the model:



Considering R-squared in this dataset - linear model performs better than non-linear.