

Assignments for the regression

1. Multiple linear regression (R^2 value) = 0.9358680970046241

2. Support vector machine

Kernel	R^2	R^2 with Standard
Linear	0.8950779234313312	-0.05569157045504447
RBF	-0.05731730927224388	-0.057418393916219834
Poly	-0.050890117824376135	-0.05710387514922144
Sigmoid	-0.0574991971677592	-0.057209358534722865

3. Decision tree without Max Features

Criterion	Splitter	R^2
Friedman_mse	Best	0.9308507771416954
Squared_error	Best	0.9027424413199499
absolute_error	Best	0.9424096349284015
poisson	Best	0.9131587092862364
Friedman_mse	random	0.8689653708705596
Squared_error	Random	0.629310160839363
absolute_error	Random	0.42806235240555746
poisson	Random	0.88510603822949

4. Decision tree with Max Features

Criterion	Splitter	Max_Feature	R^2
Friedman_mse	Best	sqrt	0.6696314937754171
Squared_error	Best	Sqrt	0.27649445442397935
absolute_error	Best	Sqrt	0.7416854301846547
poisson	Best	Sqrt	0.8156676451147452
Friedman_mse	random	Sqrt	0.4423485893774659
Squared_error	Random	Sqrt	0.006779331393294341
absolute_error	Random	Sqrt	-0.45077615239047875
poisson	Random	Sqrt	0.5955679417048936
Friedman_mse	Best	Log2	0.9033958705165149
Squared_error	Best	Log2	0.32724709942171804
absolute_error	Best	Log2	0.9304530245532152
poisson	Best	Log2	0.3058152643708364
Friedman_mse	random	Log2	-0.5099508764711247
Squared_error	Random	Log2	0.5204978992296305
absolute_error	Random	Log2	0.42289570473382476
poisson	Random	Log2	0.4816903462552474