Quiz 1 - 8A

Q1. What is the difference between a hyper-parameter and a model parameter, provide example?

A hyperparameter is a parameter of a learning algorithm (not of the model). As such, it is not affected by the learning algorithm itself; it must be set prior to training. E.g. Tree depth in decision tree, Number of trees in random forest, k in k-nearest neighbors

Q2. What is the difference between grid-search and randomized-search for hyper-parameters?

Grid search executes all combinations of provided hyper-parameters

Random search executes on defined number of iterations selecting hyper-parameters randomly from within the available search space / parameter range

Q3. What kind of relationship can not be measured by the correlation coefficient?

Non-linear relationship