







# Review

Action	R	H2O
Reading data	<code>read_csv(data_path)</code>	<code>h2o.importFile(data_path)</code>
Summarizing data	<code>summary(data_frame)</code>	<code>h2o.summary(h2o_frame)</code>
Summary statistics	<code>mean(data_frame[["x"]])</code>	<code>h2o.mean(h2o_frame)</code>
Combining rows	<code>rbind(data_frame1, data_frame2)</code>	<code>h2o.rbind(h2o_frame1, h2o_frame2)</code>
Combining columns	<code>cbind(data_frame1, data_frame2)</code>	<code>h2o.cbind(h2o_frame1, h2o_frame2)</code>
Data selection	<code>data_frame[, ]</code>	<code>h2o_frame[, ]</code>
Transforming columns	<code>log(data_frame[, "x"])</code> <code>sqrt(data_frame[, "x"])</code>	<code>log(h2o_frame[, "x"])</code> <code>sqrt(h2o_frame[, "x"])</code>
Building Random Forest	<code>model = randomForest(y ~ x, data_frame)</code>	<code>model = h2o.randomForest(x, y, train_frame)</code>
Model Prediction	<code>predict(model, data_frame)</code>	<code>h2o.predict(model, h2o_frame)</code>
Model Metrics	<code>performance(model)</code> <code>auc(model)</code>	<code>metrics = model.model_performance(frame)</code> <code>h2o.auc(model)</code>

# Python Interface Overview

Action	Pandas or scikit-learn	H2O
Reading data	<code>pandas.read_csv(data_path)</code>	<code>h2o.import_file(data_path)</code>
Summarizing data	<code>pandas_frame.describe()</code>	<code>h2o_frame.describe()</code>
Summary statistics	<code>pandas_frame.mean()</code>	<code>h2o_frame.mean()</code>
Combining rows	<code>pandas.concat(list[frame1,frame2])</code>	<code>h2o_frame.rbind(h2o_frame2)</code>
Combining columns	<code>pandas.concat(list[frame1,frame2],axis = 1)</code>	<code>h2o_frame.cbind(h2o_frame2)</code>
Data selection	<code>pandas_frame[:, :]</code>	<code>h2o_frame[:, :]</code>
Transforming columns	<code>np.log(pandas_frame[x])</code> <code>np.sqrt(pandas_frame[x])</code>	<code>h2o_frame[x].log()</code> <code>h2o_frame[x].sqrt()</code>
Building Random Forest	<code>model = RandomForestClassifier(n_estimators = 100)</code> <code>model = model.fit(x_frame, y_frame)</code>	<code>model = H2ORandomForestClassifier(n_trees = 100)</code> <code>model = model.train(x, y, train_frame)</code>
Model Prediction	<code>model.predict</code>	<code>model.predict</code>
Model Metrics	<code>metrics.auc</code>	<code>metrics = model.model_performance(frame)</code> <code>metrics.auc()</code>

# R Interface Overview

Action	R	H2O
Reading data	<code>read_csv(data_path)</code>	<code>h2o.importFile(data_path)</code>
Summarizing data	<code>summary(data_frame)</code>	<code>h2o.summary(h2o_frame)</code>
Summary statistics	<code>mean(data_frame[["x"]])</code>	<code>h2o.mean(h2o_frame)</code>
Combining rows	<code>rbind(data_frame1, data_frame2)</code>	<code>h2o.rbind(h2o_frame1, h2o_frame2)</code>
Combining columns	<code>cbind(data_frame1, data_frame2)</code>	<code>h2o.cbind(h2o_frame1, h2o_frame2)</code>
Data selection	<code>data_frame[, ]</code>	<code>h2o_frame[, ]</code>
Transforming columns	<code>log(data_frame[, "x"])</code> <code>sqrt(data_frame[, "x"])</code>	<code>log(h2o_frame[, "x"])</code> <code>sqrt(h2o_frame[, "x"])</code>
Building Random Forest	<code>model = randomForest(y ~ x, data_frame)</code>	<code>model = h2o.randomForest(x, y, train_frame)</code>
Model Prediction	<code>predict(model, data_frame)</code>	<code>h2o.predict(model, h2o_frame)</code>
Model Metrics	<code>performance(model)</code> <code>auc(model)</code>	<code>metrics = model.model_performance(frame)</code> <code>h2o.auc(model)</code>