## Recursive Feature Elimination

- Recursive Feature Elimination which is a type of wrapper feature selection method.
- The Recursive Feature Elimination (or RFE) works by recursively removing attributes and building a model on those attributes that remain.
- It uses the model accuracy to identify which attributes (and combination of attributes) contribute the most to predicting the target attribute.

- You can learn more about the RFE class in the <u>scikit-learn</u> documentation.
- # Import your necessary dependencies from sklearn.feature\_selection import RFE from sklearn.linear model import LogisticRegression

You will use RFE with the Logistic Regression classifier to select the top 3 features.

The choice of algorithm does not matter too much as long as it is skillful and consistent.

- # Feature extraction
- model = LogisticRegression()
- rfe = RFE(model, 3)
- fit = rfe.fit(X, Y)
- print("Num Features: %s" % (fit.n\_features\_))
- print("Selected Features: %s" % (fit.support\_))
- print("Feature Ranking: %s" % (fit.ranking\_))

- Num Features: 3
- Selected Features: [True False False False False True True False]
- Feature Ranking: [1 2 3 5 6 1 1 4]