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In [1]: ## How to do recursive feature elimination in Python (DecisionTreeRegressor)
def Snippet_129():
    print()
    print(format('How to do recursive feature elimination in Python (DecisionTreeRegressor)', '^82'))
    import warnings
    warnings.filterwarnings("ignore")
    # load libraries
    from sklearn.datasets import make_regression
    from sklearn.feature_selection import RFECV
    from sklearn.tree import DecisionTreeRegressor
    # Create Data
    # Generate features matrix, target vector, and the true coefficients
    X, y = make_regression(n_samples = 10000, n_features = 100, n_informative = 2)
    print(); print(X.shape)
    # Create Linear Model
    dtree = DecisionTreeRegressor()
    # Create recursive feature eliminator that scores features by mean squared errors
    rfecv = RFECV(estimator=dtree, step=1, scoring='neg_mean_squared_error', cv=4, verbose=1,
                  n_jobs = 4)
    # Fit recursive feature eliminator
    rfecv.fit(X, y)
    # Recursive feature elimination
    rfecv.transform(X)
    # Number of best features
    print(); print(rfecv)
    print(); print(rfecv.n_features_)
Snippet_129()
```

****How to do recursive feature elimination in Python (DecisionTreeRegressor)****

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(10000, 100)
Fitting estimator with 100 features.
Fitting estimator with 99 features.
Fitting estimator with 98 features.
Fitting estimator with 97 features.
Fitting estimator with 96 features.
Fitting estimator with 95 features.
Fitting estimator with 94 features.
Fitting estimator with 93 features.
Fitting estimator with 92 features.
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Fitting estimator with 12 features.
Fitting estimator with 11 features.
Fitting estimator with 10 features.
Fitting estimator with 9 features.
Fitting estimator with 8 features.
Fitting estimator with 7 features.
Fitting estimator with 6 features.
Fitting estimator with 5 features.
Fitting estimator with 4 features.
Fitting estimator with 3 features.
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RFECV(cv=4,
      estimator=DecisionTreeRegressor(criterion='mse', max_depth=None, max_features=None,
                                       max_leaf_nodes=None, min_impurity_decrease=0.0,
                                       min_impurity_split=None, min_samples_leaf=1,
                                       min_samples_split=2, min_weight_fraction_leaf=0.0,
                                       presort=False, random_state=None, splitter='best'),
      min_features_to_select=1, n_jobs=4, scoring='neg_mean_squared_error',
      step=1, verbose=1)
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In []: