**CoefficientList**

`CoefficientList[poly, var]` gives a list of coefficients of powers of `var` in `poly`, starting with power 0.

`CoefficientList[poly, {var1, var2, ...}]` gives a matrix of coefficients of the `var_i`.

Example: `CoefficientList[x^2 + 2 x y - y, {x, y}]` → `{0, -1}, {0, 2}, {1, 0}`. The dimensions of the matrix returned by `CoefficientList` are determined by the values of the `Exponent[poly, var]`. Terms that do not contain positive integer powers of a particular variable are included in the first element of the list for that variable.

`CoefficientList` always returns a rectangular matrix. Combinations of powers that do not appear in `poly` give zeroes in the matrix. See page 383. See also: `Series`, `Collect`, `FactorList`.