Thermoeconomic Analysis Toolbox

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TaesLab Utility Funtions Reference

Import/Export Functions

Name	Description
exportCSV	Save a cell array as a CSV file.
exportMAT	Save a cTaesLab object as a MAT file
importCSV	Read a CSV file and return its contents as a cell array.
importMAT	Create a cTaesLab object from a previously saved MAT file.

Validation Functions

Name	Description
isFilename	Check if file name is valid for read/write mode.
isIndex	Check if a number belongs to an index range.
isInteger	Check if the value is an integer number.
isMatlab	Identifies if the function has been executed in MATLAB.
isOctave	Identifies if the function has been executed in Octave.
isObject	Check if a cTaesLab object belongs to a specific class.
isValid	Check if it is a valid cTaesLab object.
isSquareMatrix	Check if the matrix is square.
isNonNegativeMatrix	Check if the matrix is non-negative.
isNonSingularMatrix	Check if the matrix I-A is non-singular.

Matrix Operations

Name	Description
divideCol	Divide each column of matrix A by the corresponding element of vector x.
divideRow	Divide each row of matrix A by the corresponding element of vector x.
scaleCol	Multiplies each column of matrix A by the corresponding element of vector x.
scaleRow	Multiplies each row of matrix A by the corresponding element of vector x.
vDivide	Element-wise right division. Overload operator rdivide when 0/0.
tolerance	Compute the relative tolerance value for a matrix.
zerotol	Sets to zero the matrix values near to zero.
logicalMatrix	Convert a real matrix to logical with zero tolerance.
similarDemandMatrix	Compute the demand-driven adjacency matrix from the resource-driven matrix.
similarDemandOperator	Compute the demand-driven operator from the resource-driven operator.
similarResourceMatrix	Compute the resource-driven adjacency matrix from the demand-driven matrix.
similarResourceOperator	Compute the resource-driven operator from the demmand-drive operator.
transitiveClosure	Compute the transitive closure of a digraph.
inverseMatrixOperator	Calculate the inverse of the M-Matrix I-A

Miscellaneous Functions

Name	Description
fdisplay	Display a matrix A using C-like formatting.
buildMessage	Build error messages for TaesLab functions.