

# Reference Manual wrapnaumpy3

## NAME

wrapnaumpy3.wrapnaumpy3 - # wrapnaumpy3.py - module for Matrix class.

## CLASSES

**builtins.list(builtins.object)**

Matrix

**builtins.object**

Utilities

## class Matrix(builtins.list)

Method resolution order:

Matrix  
builtins.list  
builtins.object

Methods defined here:

`__add__(self, other)`

Matrix addition.

`__eq__(self, other)`

Matrix equality

`__getitem__(self, key)`

get index value.

`__init__(self, m=1, n=1)`

Create zero matrix of

m = no of rows, n = no of columns.

`__invert__(self)`

[ ~ ] Matrix inversion).

`__mul__(self, other)`

Matrix multiplication: [ \* ] when both self and other are matrices. When one is a scalar and the other is a matrix, scalar multiplication of a matrix.

`__pow__(self, other)`

[ \*\* ] Equation solver x = self (times) rhs ).

`__rmul__(self, other)`

number \* matrix --> matrix

`__setitem__(self, key, value)`

Set index value.

`__str__(self)`

Matrix string format for print function.

`__sub__(self, other)`

Matrix subtraction.

`matadd(self, other)`

return (mat add) = self + other  
 matcopy(self)  
 Creates and returns a copy of the matrix.  
 matequal(self, other)  
 Matrices are equal, return True or False.  
 matinvert(self)  
 amat.matinvert() --> inverse of amat.  
 matmult(self, other)  
 self.matmult(other) --> matrix product self x other.  
 matsub(self, other)  
 return (mat Subtract) = self - other.  
 mattranspose(self)  
 self.mattranspose --> returns transpose (self unchanged).  
 matunit(self)  
 Make self the unit matrix (in place).  
 neatprint(self, prnt=<function printline>, LineLen=5)  
 prinline = the line printing function.  
 Neatly prints matrix self of size (m x n).  
 scalarmult(self, factor)  
 Multiply matrix by scalar (in place).  
 solve(self, other)  
 other is rhs and is returned as solution. Partial pivoting.

## Data descriptors defined here:

\_\_dict\_\_  
 dictionary for instance variables (if defined)  
 \_\_weakref\_\_  
 list of weak references to the object (if defined)

## Data and other attributes defined here:

\_\_hash\_\_ = None  
 Methods inherited from builtins.list:  
 \_\_contains\_\_(...)  
 x.\_\_contains\_\_(y) <==> y in x  
 \_\_delitem\_\_(...)  
 x.\_\_delitem\_\_(y) <==> del x[y]  
 \_\_ge\_\_(...)  
 x.\_\_ge\_\_(y) <==> x>=y  
 \_\_getattr\_\_(...)  
 x.\_\_getattr\_\_('name') <==> x.name  
 \_\_gt\_\_(...)  
 x.\_\_gt\_\_(y) <==> x>y  
 \_\_iadd\_\_(...)

`x.__iadd__(y) <==> x+=y`  
`__imul__(...)`  
`x.__imul__(y) <==> x*=y`  
`__iter__(...)`  
`x.__iter__() <==> iter(x)`  
`__le__(...)`  
`x.__le__(y) <==> x<=y`  
`__len__(...)`  
`x.__len__() <==> len(x)`  
`__lt__(...)`  
`x.__lt__(y) <==> x<y`  
`__ne__(...)`  
`x.__ne__(y) <==> x!=y`  
`__repr__(...)`  
`x.__repr__() <==> repr(x)`  
`__reversed__(...)`  
`L.__reversed__() -- return a reverse iterator over the list`  
`__sizeof__(...)`  
`L.__sizeof__() -- size of L in memory, in bytes`  
`append(...)`  
`L.append(object) -- append object to end`  
`count(...)`  
`L.count(value) -> integer -- return number of occurrences of value`  
`extend(...)`  
`L.extend(iterable) -- extend list by appending elements from the iterable`  
`index(...)`  
`L.index(value, [start, [stop]]) -> integer -- return first index of value.`  
`Raises ValueError if the value is not present.`  
`insert(...)`  
`L.insert(index, object) -- insert object before index`  
`pop(...)`  
`L.pop([index]) -> item -- remove and return item at index (default last).`  
`Raises IndexError if list is empty or index is out of range.`  
`remove(...)`  
`L.remove(value) -- remove first occurrence of value.`  
`Raises ValueError if the value is not present.`  
`reverse(...)`  
`L.reverse() -- reverse IN PLACE`  
`sort(...)`  
`L.sort(key=None, reverse=False) -- stable sort IN PLACE`  
Data and other attributes inherited from `builtins.list`:  
`__new__ = <built-in method __new__ of type object>`  
`T.__new__(S, ...) -> a new object with type S, a subtype of T`

## class Utilities(builtins.object)

Methods defined here:

`enterdata(self, m, n, datalist, autoprint=True)`

`datalist` --> create store matrix and enter data into store.

`printline(self, line)`

Function to simulate appending to a plainText widget.

## Data descriptors defined here

`__dict__`

dictionary for instance variables (if defined)

`__weakref__`

list of weak references to the object (if defined)

## FUNCTIONS

**`printline(line)`**

Function to simulate appending to a plainText widget.

## VERSION

0.0.3

## FILE

`/usr/local/lib/python3.2/dist-packages/wrapnumpy3/wrapnumpy3.py`