

SUBSCRIPTING

<code>A[:,c]</code>	Selects the cth column of the array A .
<code>A[r,:]</code>	Selects the rth row of the array A .
<code>A[:,:]</code>	Selects all elements of A ; this is equivalent to the entire array.
<code>A[:,j:k]</code>	Selects all rows in columns from j to k-1 (exclusive).
<code>A[:,c]</code>	Equivalent to selecting a specific column
<code>A[l,r,:]</code>	In a three-dimensional array A , this selects all elements in the lth layer and rth row, retrieving all columns along the third dimension.
<code>A[j:k]</code> or <code>A[j:k,]</code> or <code>A[:,j:k]</code>	Selects rows from index j to k-1 (exclusive).
<code>A[:]</code>	Selects all elements of A , treating it as a single vector. On assignment, A[:] fills A , preserving its shape.

PRECEDENCE

Operator	Description
<code>(expressions...),</code> <code>[expressions..., {key: value...},</code> <code>{expressions...}</code>	Binding or parenthesized expression, list display, dictionary display, set display
<code>x[index], x[index:index], x(arguments...),</code> <code>x.attribute</code>	Subscription, slicing, call, attribute reference
<code>await x</code>	Await expression
<code>**</code>	Exponentiation [5]
<code>+x, -x, ~x</code>	Positive, negative, bitwise NOT
<code>*, @, /, //, %</code>	Multiplication, matrix multiplication, division, floor division, remainder [6]
<code>+, -</code>	Addition and subtraction
<code><<, >></code>	Shifts
<code>&</code>	Bitwise AND
<code>^</code>	Bitwise XOR
<code> </code>	Bitwise OR
<code>in, not in, is, is not, <, <=, >, >=, !=, ==</code>	Comparisons, including membership tests and identity tests
<code>not x</code>	Boolean NOT
<code>and</code>	Boolean AND
<code>or</code>	Boolean OR
<code>if - else</code>	Conditional expression
<code>lambda</code>	Lambda expression
<code>:=</code>	Assignment expression