Math

**Note:** Functions taking **Tensor** arguments can also take anything accepted by **[tf.convert\_to\_tensor](https://www.tensorflow.org/api_docs/python/tf/convert_to_tensor)**.**Note:** Elementwise binary operations in TensorFlow follow [numpy-style broadcasting](http://docs.scipy.org/doc/numpy/user/basics.broadcasting.html).

Arithmetic Operators

TensorFlow provides several operations that you can use to add basic arithmetic operators to your graph.

* [tf.add](https://www.tensorflow.org/api_docs/python/tf/add)
* [tf.subtract](https://www.tensorflow.org/api_docs/python/tf/subtract)
* [tf.multiply](https://www.tensorflow.org/api_docs/python/tf/multiply)
* [tf.scalar\_mul](https://www.tensorflow.org/api_docs/python/tf/scalar_mul)
* [tf.div](https://www.tensorflow.org/api_docs/python/tf/div)
* [tf.divide](https://www.tensorflow.org/api_docs/python/tf/divide)
* [tf.truediv](https://www.tensorflow.org/api_docs/python/tf/truediv)
* [tf.floordiv](https://www.tensorflow.org/api_docs/python/tf/floordiv)
* [tf.realdiv](https://www.tensorflow.org/api_docs/python/tf/realdiv)
* [tf.truncatediv](https://www.tensorflow.org/api_docs/python/tf/truncatediv)
* [tf.floor\_div](https://www.tensorflow.org/api_docs/python/tf/floor_div)
* [tf.truncatemod](https://www.tensorflow.org/api_docs/python/tf/truncatemod)
* [tf.floormod](https://www.tensorflow.org/api_docs/python/tf/floormod)
* [tf.mod](https://www.tensorflow.org/api_docs/python/tf/floormod)
* [tf.cross](https://www.tensorflow.org/api_docs/python/tf/cross)

Basic Math Functions

TensorFlow provides several operations that you can use to add basic mathematical functions to your graph.

* [tf.add\_n](https://www.tensorflow.org/api_docs/python/tf/add_n)
* [tf.abs](https://www.tensorflow.org/api_docs/python/tf/abs)
* [tf.negative](https://www.tensorflow.org/api_docs/python/tf/negative)
* [tf.sign](https://www.tensorflow.org/api_docs/python/tf/sign)
* [tf.reciprocal](https://www.tensorflow.org/api_docs/python/tf/reciprocal)
* [tf.square](https://www.tensorflow.org/api_docs/python/tf/square)
* [tf.round](https://www.tensorflow.org/api_docs/python/tf/round)
* [tf.sqrt](https://www.tensorflow.org/api_docs/python/tf/sqrt)
* [tf.rsqrt](https://www.tensorflow.org/api_docs/python/tf/rsqrt)
* [tf.pow](https://www.tensorflow.org/api_docs/python/tf/pow)
* [tf.exp](https://www.tensorflow.org/api_docs/python/tf/exp)
* [tf.expm1](https://www.tensorflow.org/api_docs/python/tf/expm1)
* [tf.log](https://www.tensorflow.org/api_docs/python/tf/log)
* [tf.log1p](https://www.tensorflow.org/api_docs/python/tf/log1p)
* [tf.ceil](https://www.tensorflow.org/api_docs/python/tf/ceil)
* [tf.floor](https://www.tensorflow.org/api_docs/python/tf/floor)
* [tf.maximum](https://www.tensorflow.org/api_docs/python/tf/maximum)
* [tf.minimum](https://www.tensorflow.org/api_docs/python/tf/minimum)
* [tf.cos](https://www.tensorflow.org/api_docs/python/tf/cos)
* [tf.sin](https://www.tensorflow.org/api_docs/python/tf/sin)
* [tf.lbeta](https://www.tensorflow.org/api_docs/python/tf/lbeta)
* [tf.tan](https://www.tensorflow.org/api_docs/python/tf/tan)
* [tf.acos](https://www.tensorflow.org/api_docs/python/tf/acos)
* [tf.asin](https://www.tensorflow.org/api_docs/python/tf/asin)
* [tf.atan](https://www.tensorflow.org/api_docs/python/tf/atan)
* [tf.cosh](https://www.tensorflow.org/api_docs/python/tf/cosh)
* [tf.sinh](https://www.tensorflow.org/api_docs/python/tf/sinh)
* [tf.asinh](https://www.tensorflow.org/api_docs/python/tf/asinh)
* [tf.acosh](https://www.tensorflow.org/api_docs/python/tf/acosh)
* [tf.atanh](https://www.tensorflow.org/api_docs/python/tf/atanh)
* [tf.lgamma](https://www.tensorflow.org/api_docs/python/tf/lgamma)
* [tf.digamma](https://www.tensorflow.org/api_docs/python/tf/digamma)
* [tf.erf](https://www.tensorflow.org/api_docs/python/tf/erf)
* [tf.erfc](https://www.tensorflow.org/api_docs/python/tf/erfc)
* [tf.squared\_difference](https://www.tensorflow.org/api_docs/python/tf/squared_difference)
* [tf.igamma](https://www.tensorflow.org/api_docs/python/tf/igamma)
* [tf.igammac](https://www.tensorflow.org/api_docs/python/tf/igammac)
* [tf.zeta](https://www.tensorflow.org/api_docs/python/tf/zeta)
* [tf.polygamma](https://www.tensorflow.org/api_docs/python/tf/polygamma)
* [tf.betainc](https://www.tensorflow.org/api_docs/python/tf/betainc)
* [tf.rint](https://www.tensorflow.org/api_docs/python/tf/rint)

Matrix Math Functions

TensorFlow provides several operations that you can use to add linear algebra functions on matrices to your graph.

* [tf.diag](https://www.tensorflow.org/api_docs/python/tf/diag)
* [tf.diag\_part](https://www.tensorflow.org/api_docs/python/tf/diag_part)
* [tf.trace](https://www.tensorflow.org/api_docs/python/tf/trace)
* [tf.transpose](https://www.tensorflow.org/api_docs/python/tf/transpose)
* [tf.eye](https://www.tensorflow.org/api_docs/python/tf/eye)
* [tf.matrix\_diag](https://www.tensorflow.org/api_docs/python/tf/matrix_diag)
* [tf.matrix\_diag\_part](https://www.tensorflow.org/api_docs/python/tf/matrix_diag_part)
* [tf.matrix\_band\_part](https://www.tensorflow.org/api_docs/python/tf/matrix_band_part)
* [tf.matrix\_set\_diag](https://www.tensorflow.org/api_docs/python/tf/matrix_set_diag)
* [tf.matrix\_transpose](https://www.tensorflow.org/api_docs/python/tf/matrix_transpose)
* [tf.matmul](https://www.tensorflow.org/api_docs/python/tf/matmul)
* [tf.norm](https://www.tensorflow.org/api_docs/python/tf/norm)
* [tf.matrix\_determinant](https://www.tensorflow.org/api_docs/python/tf/matrix_determinant)
* [tf.matrix\_inverse](https://www.tensorflow.org/api_docs/python/tf/matrix_inverse)
* [tf.cholesky](https://www.tensorflow.org/api_docs/python/tf/cholesky)
* [tf.cholesky\_solve](https://www.tensorflow.org/api_docs/python/tf/cholesky_solve)
* [tf.matrix\_solve](https://www.tensorflow.org/api_docs/python/tf/matrix_solve)
* [tf.matrix\_triangular\_solve](https://www.tensorflow.org/api_docs/python/tf/matrix_triangular_solve)
* [tf.matrix\_solve\_ls](https://www.tensorflow.org/api_docs/python/tf/matrix_solve_ls)
* [tf.qr](https://www.tensorflow.org/api_docs/python/tf/qr)
* [tf.self\_adjoint\_eig](https://www.tensorflow.org/api_docs/python/tf/self_adjoint_eig)
* [tf.self\_adjoint\_eigvals](https://www.tensorflow.org/api_docs/python/tf/self_adjoint_eigvals)
* [tf.svd](https://www.tensorflow.org/api_docs/python/tf/svd)

Tensor Math Function

TensorFlow provides operations that you can use to add tensor functions to your graph.

* [tf.tensordot](https://www.tensorflow.org/api_docs/python/tf/tensordot)

Complex Number Functions

TensorFlow provides several operations that you can use to add complex number functions to your graph.

* [tf.complex](https://www.tensorflow.org/api_docs/python/tf/complex)
* [tf.conj](https://www.tensorflow.org/api_docs/python/tf/conj)
* [tf.imag](https://www.tensorflow.org/api_docs/python/tf/imag)
* [tf.angle](https://www.tensorflow.org/api_docs/python/tf/angle)
* [tf.real](https://www.tensorflow.org/api_docs/python/tf/real)

Reduction

TensorFlow provides several operations that you can use to perform common math computations that reduce various dimensions of a tensor.

* [tf.reduce\_sum](https://www.tensorflow.org/api_docs/python/tf/reduce_sum)
* [tf.reduce\_prod](https://www.tensorflow.org/api_docs/python/tf/reduce_prod)
* [tf.reduce\_min](https://www.tensorflow.org/api_docs/python/tf/reduce_min)
* [tf.reduce\_max](https://www.tensorflow.org/api_docs/python/tf/reduce_max)
* [tf.reduce\_mean](https://www.tensorflow.org/api_docs/python/tf/reduce_mean)
* [tf.reduce\_all](https://www.tensorflow.org/api_docs/python/tf/reduce_all)
* [tf.reduce\_any](https://www.tensorflow.org/api_docs/python/tf/reduce_any)
* [tf.reduce\_logsumexp](https://www.tensorflow.org/api_docs/python/tf/reduce_logsumexp)
* [tf.count\_nonzero](https://www.tensorflow.org/api_docs/python/tf/count_nonzero)
* [tf.accumulate\_n](https://www.tensorflow.org/api_docs/python/tf/accumulate_n)
* [tf.einsum](https://www.tensorflow.org/api_docs/python/tf/einsum)

Scan

TensorFlow provides several operations that you can use to perform scans (running totals) across one axis of a tensor.

* [tf.cumsum](https://www.tensorflow.org/api_docs/python/tf/cumsum)
* [tf.cumprod](https://www.tensorflow.org/api_docs/python/tf/cumprod)

Segmentation

TensorFlow provides several operations that you can use to perform common math computations on tensor segments. Here a segmentation is a partitioning of a tensor along the first dimension, i.e. it defines a mapping from the first dimension onto segment\_ids. The segment\_ids tensor should be the size of the first dimension, d0, with consecutive IDs in the range 0 to k, where k<d0. In particular, a segmentation of a matrix tensor is a mapping of rows to segments.

For example:

c = tf.constant([[1,2,3,4], [-1,-2,-3,-4], [5,6,7,8]])  
tf.segment\_sum(c, tf.constant([0, 0, 1]))  
  ==>  [[0 0 0 0]  
        [5 6 7 8]]

* [tf.segment\_sum](https://www.tensorflow.org/api_docs/python/tf/segment_sum)
* [tf.segment\_prod](https://www.tensorflow.org/api_docs/python/tf/segment_prod)
* [tf.segment\_min](https://www.tensorflow.org/api_docs/python/tf/segment_min)
* [tf.segment\_max](https://www.tensorflow.org/api_docs/python/tf/segment_max)
* [tf.segment\_mean](https://www.tensorflow.org/api_docs/python/tf/segment_mean)
* [tf.unsorted\_segment\_sum](https://www.tensorflow.org/api_docs/python/tf/unsorted_segment_sum)
* [tf.sparse\_segment\_sum](https://www.tensorflow.org/api_docs/python/tf/sparse_segment_sum)
* [tf.sparse\_segment\_mean](https://www.tensorflow.org/api_docs/python/tf/sparse_segment_mean)
* [tf.sparse\_segment\_sqrt\_n](https://www.tensorflow.org/api_docs/python/tf/sparse_segment_sqrt_n)

Sequence Comparison and Indexing

TensorFlow provides several operations that you can use to add sequence comparison and index extraction to your graph. You can use these operations to determine sequence differences and determine the indexes of specific values in a tensor.

* [tf.argmin](https://www.tensorflow.org/api_docs/python/tf/argmin)
* [tf.argmax](https://www.tensorflow.org/api_docs/python/tf/argmax)
* [tf.setdiff1d](https://www.tensorflow.org/api_docs/python/tf/setdiff1d)
* [tf.where](https://www.tensorflow.org/api_docs/python/tf/where)
* [tf.unique](https://www.tensorflow.org/api_docs/python/tf/unique)
* [tf.edit\_distance](https://www.tensorflow.org/api_docs/python/tf/edit_distance)
* [tf.invert\_permutation](https://www.tensorflow.org/api_docs/python/tf/invert_permutation)

Mates

**Nota: Las**funciones que toman **Tensor**argumentos también pueden tomar cualquier cosa aceptada por[**tf.convert\_to\_tensor**](https://www.tensorflow.org/api_docs/python/tf/convert_to_tensor).**Nota:**las operaciones binarias de Elementwise en TensorFlow siguen la [difusión de estilo numpy](http://docs.scipy.org/doc/numpy/user/basics.broadcasting.html) .

Operadores aritméticos

TensorFlow proporciona varias operaciones que puede usar para agregar operadores aritméticos básicos a su gráfico.

* [tf.add](https://www.tensorflow.org/api_docs/python/tf/add)
* [tf.subtract](https://www.tensorflow.org/api_docs/python/tf/subtract)
* [tf.multiply](https://www.tensorflow.org/api_docs/python/tf/multiply)
* [tf.scalar\_mul](https://www.tensorflow.org/api_docs/python/tf/scalar_mul)
* [tf.div](https://www.tensorflow.org/api_docs/python/tf/div)
* [tf.divide](https://www.tensorflow.org/api_docs/python/tf/divide)
* [tf.truediv](https://www.tensorflow.org/api_docs/python/tf/truediv)
* [tf.floordiv](https://www.tensorflow.org/api_docs/python/tf/floordiv)
* [tf.realdiv](https://www.tensorflow.org/api_docs/python/tf/realdiv)
* [tf.truncatediv](https://www.tensorflow.org/api_docs/python/tf/truncatediv)
* [tf.floor\_div](https://www.tensorflow.org/api_docs/python/tf/floor_div)
* [tf.truncatemod](https://www.tensorflow.org/api_docs/python/tf/truncatemod)
* [tf.floormod](https://www.tensorflow.org/api_docs/python/tf/floormod)
* [tf.mod](https://www.tensorflow.org/api_docs/python/tf/floormod)
* [tf.cross](https://www.tensorflow.org/api_docs/python/tf/cross)

Funciones matemáticas básicas

TensorFlow proporciona varias operaciones que puede usar para agregar funciones matemáticas básicas a su gráfico.

* [tf.add\_n](https://www.tensorflow.org/api_docs/python/tf/add_n)
* [tf.abs](https://www.tensorflow.org/api_docs/python/tf/abs)
* [tf.negative](https://www.tensorflow.org/api_docs/python/tf/negative)
* [tf.sign](https://www.tensorflow.org/api_docs/python/tf/sign)
* [tf.reciprocal](https://www.tensorflow.org/api_docs/python/tf/reciprocal)
* [tf.square](https://www.tensorflow.org/api_docs/python/tf/square)
* [tf.round](https://www.tensorflow.org/api_docs/python/tf/round)
* [tf.sqrt](https://www.tensorflow.org/api_docs/python/tf/sqrt)
* [tf.rsqrt](https://www.tensorflow.org/api_docs/python/tf/rsqrt)
* [tf.pow](https://www.tensorflow.org/api_docs/python/tf/pow)
* [tf.exp](https://www.tensorflow.org/api_docs/python/tf/exp)
* [tf.expm1](https://www.tensorflow.org/api_docs/python/tf/expm1)
* [tf.log](https://www.tensorflow.org/api_docs/python/tf/log)
* [tf.log1p](https://www.tensorflow.org/api_docs/python/tf/log1p)
* [tf.ceil](https://www.tensorflow.org/api_docs/python/tf/ceil)
* [tf.floor](https://www.tensorflow.org/api_docs/python/tf/floor)
* [tf.maximum](https://www.tensorflow.org/api_docs/python/tf/maximum)
* [tf.minimum](https://www.tensorflow.org/api_docs/python/tf/minimum)
* [tf.cos](https://www.tensorflow.org/api_docs/python/tf/cos)
* [tf.sin](https://www.tensorflow.org/api_docs/python/tf/sin)
* [tf.lbeta](https://www.tensorflow.org/api_docs/python/tf/lbeta)
* [tf.tan](https://www.tensorflow.org/api_docs/python/tf/tan)
* [tf.acos](https://www.tensorflow.org/api_docs/python/tf/acos)
* [tf.asin](https://www.tensorflow.org/api_docs/python/tf/asin)
* [tf.atan](https://www.tensorflow.org/api_docs/python/tf/atan)
* [tf.cosh](https://www.tensorflow.org/api_docs/python/tf/cosh)
* [tf.sinh](https://www.tensorflow.org/api_docs/python/tf/sinh)
* [tf.asinh](https://www.tensorflow.org/api_docs/python/tf/asinh)
* [tf.acosh](https://www.tensorflow.org/api_docs/python/tf/acosh)
* [tf.atanh](https://www.tensorflow.org/api_docs/python/tf/atanh)
* [tf.lgamma](https://www.tensorflow.org/api_docs/python/tf/lgamma)
* [tf.digamma](https://www.tensorflow.org/api_docs/python/tf/digamma)
* [tf.erf](https://www.tensorflow.org/api_docs/python/tf/erf)
* [tf.erfc](https://www.tensorflow.org/api_docs/python/tf/erfc)
* [tf.squared\_difference](https://www.tensorflow.org/api_docs/python/tf/squared_difference)
* [tf.igamma](https://www.tensorflow.org/api_docs/python/tf/igamma)
* [tf.igammac](https://www.tensorflow.org/api_docs/python/tf/igammac)
* [tf.zeta](https://www.tensorflow.org/api_docs/python/tf/zeta)
* [tf.polygamma](https://www.tensorflow.org/api_docs/python/tf/polygamma)
* [tf.betainc](https://www.tensorflow.org/api_docs/python/tf/betainc)
* [tf.rint](https://www.tensorflow.org/api_docs/python/tf/rint)

Funciones Matriz Matemáticas

TensorFlow proporciona varias operaciones que puede usar para agregar funciones de álgebra lineal en matrices a su gráfico.

* [tf.diag](https://www.tensorflow.org/api_docs/python/tf/diag)
* [tf.diag\_part](https://www.tensorflow.org/api_docs/python/tf/diag_part)
* [tf.trace](https://www.tensorflow.org/api_docs/python/tf/trace)
* [tf.transpose](https://www.tensorflow.org/api_docs/python/tf/transpose)
* [tf.eye](https://www.tensorflow.org/api_docs/python/tf/eye)
* [tf.matrix\_diag](https://www.tensorflow.org/api_docs/python/tf/matrix_diag)
* [tf.matrix\_diag\_part](https://www.tensorflow.org/api_docs/python/tf/matrix_diag_part)
* [tf.matrix\_band\_part](https://www.tensorflow.org/api_docs/python/tf/matrix_band_part)
* [tf.matrix\_set\_diag](https://www.tensorflow.org/api_docs/python/tf/matrix_set_diag)
* [tf.matrix\_transpose](https://www.tensorflow.org/api_docs/python/tf/matrix_transpose)
* [tf.matmul](https://www.tensorflow.org/api_docs/python/tf/matmul)
* [tf.norm](https://www.tensorflow.org/api_docs/python/tf/norm)
* [tf.matrix\_determinant](https://www.tensorflow.org/api_docs/python/tf/matrix_determinant)
* [tf.matrix\_inverse](https://www.tensorflow.org/api_docs/python/tf/matrix_inverse)
* [tf.cholesky](https://www.tensorflow.org/api_docs/python/tf/cholesky)
* [tf.cholesky\_solve](https://www.tensorflow.org/api_docs/python/tf/cholesky_solve)
* [tf.matrix\_solve](https://www.tensorflow.org/api_docs/python/tf/matrix_solve)
* [tf.matrix\_triangular\_solve](https://www.tensorflow.org/api_docs/python/tf/matrix_triangular_solve)
* [tf.matrix\_solve\_ls](https://www.tensorflow.org/api_docs/python/tf/matrix_solve_ls)
* [tf.qr](https://www.tensorflow.org/api_docs/python/tf/qr)
* [tf.self\_adjoint\_eig](https://www.tensorflow.org/api_docs/python/tf/self_adjoint_eig)
* [tf.self\_adjoint\_eigvals](https://www.tensorflow.org/api_docs/python/tf/self_adjoint_eigvals)
* [tf.svd](https://www.tensorflow.org/api_docs/python/tf/svd)

Función matemática Tensor

TensorFlow proporciona operaciones que puede usar para agregar funciones de tensor a su gráfico.

* [tf.tensordot](https://www.tensorflow.org/api_docs/python/tf/tensordot)

Funciones de números complejos

TensorFlow proporciona varias operaciones que puede usar para agregar funciones de números complejos a su gráfico.

* [tf.complex](https://www.tensorflow.org/api_docs/python/tf/complex)
* [tf.conj](https://www.tensorflow.org/api_docs/python/tf/conj)
* [tf.imag](https://www.tensorflow.org/api_docs/python/tf/imag)
* [tf.angle](https://www.tensorflow.org/api_docs/python/tf/angle)
* [tf.real](https://www.tensorflow.org/api_docs/python/tf/real)

Reducción

TensorFlow proporciona varias operaciones que puede usar para realizar cálculos matemáticos comunes que reducen varias dimensiones de un tensor.

* [tf.reduce\_sum](https://www.tensorflow.org/api_docs/python/tf/reduce_sum)
* [tf.reduce\_prod](https://www.tensorflow.org/api_docs/python/tf/reduce_prod)
* [tf.reduce\_min](https://www.tensorflow.org/api_docs/python/tf/reduce_min)
* [tf.reduce\_max](https://www.tensorflow.org/api_docs/python/tf/reduce_max)
* [tf.reduce\_mean](https://www.tensorflow.org/api_docs/python/tf/reduce_mean)
* [tf.reduce\_all](https://www.tensorflow.org/api_docs/python/tf/reduce_all)
* [tf.reduce\_any](https://www.tensorflow.org/api_docs/python/tf/reduce_any)
* [tf.reduce\_logsumexp](https://www.tensorflow.org/api_docs/python/tf/reduce_logsumexp)
* [tf.count\_nonzero](https://www.tensorflow.org/api_docs/python/tf/count_nonzero)
* [tf.accumulate\_n](https://www.tensorflow.org/api_docs/python/tf/accumulate_n)
* [tf.einsum](https://www.tensorflow.org/api_docs/python/tf/einsum)

Escanear

TensorFlow proporciona varias operaciones que puede usar para realizar escaneos (totales acumulados) en un eje de un tensor.

* [tf.cumsum](https://www.tensorflow.org/api_docs/python/tf/cumsum)
* [tf.cumprod](https://www.tensorflow.org/api_docs/python/tf/cumprod)

Segmentación

TensorFlow proporciona varias operaciones que puede usar para realizar cálculos matemáticos comunes en segmentos de tensores. Aquí una segmentación es una partición de un tensor a lo largo de la primera dimensión, es decir, define un mapeo desde la primera dimensión hacia segment\_ids. El segment\_idstensor debe ser del tamaño de la primera dimensión d0, con identificaciones consecutivas en el rango 0de k, donde k<d0. En particular, una segmentación de un tensor de matriz es un mapeo de filas a segmentos.

Por ejemplo:

c = tf.constant([[1,2,3,4], [-1,-2,-3,-4], [5,6,7,8]])  
tf.segment\_sum(c, tf.constant([0, 0, 1]))  
  ==>  [[0 0 0 0]  
        [5 6 7 8]]

* [tf.segment\_sum](https://www.tensorflow.org/api_docs/python/tf/segment_sum)
* [tf.segment\_prod](https://www.tensorflow.org/api_docs/python/tf/segment_prod)
* [tf.segment\_min](https://www.tensorflow.org/api_docs/python/tf/segment_min)
* [tf.segment\_max](https://www.tensorflow.org/api_docs/python/tf/segment_max)
* [tf.segment\_mean](https://www.tensorflow.org/api_docs/python/tf/segment_mean)
* [tf.unsorted\_segment\_sum](https://www.tensorflow.org/api_docs/python/tf/unsorted_segment_sum)
* [tf.sparse\_segment\_sum](https://www.tensorflow.org/api_docs/python/tf/sparse_segment_sum)
* [tf.sparse\_segment\_mean](https://www.tensorflow.org/api_docs/python/tf/sparse_segment_mean)
* [tf.sparse\_segment\_sqrt\_n](https://www.tensorflow.org/api_docs/python/tf/sparse_segment_sqrt_n)

Comparación de secuencias e indexación

TensorFlow proporciona varias operaciones que puede usar para agregar comparación de secuencia y extracción de índice a su gráfica. Puede usar estas operaciones para determinar diferencias de secuencia y determinar los índices de valores específicos en un tensor.

* [tf.argmin](https://www.tensorflow.org/api_docs/python/tf/argmin)
* [tf.argmax](https://www.tensorflow.org/api_docs/python/tf/argmax)
* [tf.setdiff1d](https://www.tensorflow.org/api_docs/python/tf/setdiff1d)
* [tf.where](https://www.tensorflow.org/api_docs/python/tf/where)
* [tf.unique](https://www.tensorflow.org/api_docs/python/tf/unique)
* [tf.edit\_distance](https://www.tensorflow.org/api_docs/python/tf/edit_distance)
* [tf.invert\_permutation](https://www.tensorflow.org/api_docs/python/tf/invert_permutation)