tf.sparse_reduce_sum

```
sparse_reduce_sum(
    sp_input,
    axis=None,
    keep_dims=False,
    reduction_axes=None
)
```

Defined in `tensorflow/python/ops/sparse_ops.py`.

See the guide: Sparse Tensors > Reduction

Computes the sum of elements across dimensions of a SparseTensor.

This Op takes a SparseTensor and is the sparse counterpart to `tf.reduce_sum()`. In particular, this Op also returns a dense `Tensor` instead of a sparse one.

Reduces `sp_input` along the dimensions given in `reduction_axes`. Unless `keep_dims` is true, the rank of the tensor is reduced by 1 for each entry in `reduction_axes`. If `keep_dims` is true, the reduced dimensions are retained with length 1.

If `reduction_axes` has no entries, all dimensions are reduced, and a tensor with a single element is returned. Additionally, the axes can be negative, similar to the indexing rules in Python.

For example:

```
# 'x' represents [[1, ?, 1]
#                 [?, 1, ?]]
# where ? is implicitly-zero.
tf.sparse_reduce_sum(x) ==> 3
tf.sparse_reduce_sum(x, 0) ==> [1, 1, 1]
tf.sparse_reduce_sum(x, 1) ==> [2, 1]  # Can also use -1 as the axis.
tf.sparse_reduce_sum(x, 1, keep_dims=True) ==> [[2], [1]]
tf.sparse_reduce_sum(x, [0, 1]) ==> 3
```

Args:

- `sp_input`: The SparseTensor to reduce. Should have numeric type.
- `axis`: The dimensions to reduce; list or scalar. If `None` (the default), reduces all dimensions.
- `keep_dims`: If true, retain reduced dimensions with length 1.
- `reduction_axes`: Deprecated name of axis.

Returns:

The reduced Tensor.

Except as otherwise noted, the content of this page is licensed under the Creative Commons Attribution 3.0 License, and code samples are licensed under the Apache 2.0 License. For details, see our Site Policies. Java is a registered trademark of Oracle and/or its affiliates.

Last updated November 2, 2017.

Stay Connected

Blog

GitHub

Twitter

Support

Issue Tracker

Release Notes

Stack Overflow

English

Terms | **Privacy**