

tf.sparse_segment_sum

```
sparse_segment_sum(  
    data,  
    indices,  
    segment_ids,  
    name=None  
)
```

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

See the guide: [Math > Segmentation](#)

Computes the sum along sparse segments of a tensor.

Read [the section on segmentation](#) for an explanation of segments.

Like `SegmentSum`, but `segment_ids` can have rank less than `data`'s first dimension, selecting a subset of dimension 0, specified by `indices`.

For example:

```
c = tf.constant([[1,2,3,4], [-1,-2,-3,-4], [5,6,7,8]])  
  
# Select two rows, one segment.  
tf.sparse_segment_sum(c, tf.constant([0, 1]), tf.constant([0, 0]))  
# => [[0 0 0 0]]  
  
# Select two rows, two segment.  
tf.sparse_segment_sum(c, tf.constant([0, 1]), tf.constant([0, 1]))  
# => [[ 1  2  3  4]  
#      [-1 -2 -3 -4]]  
  
# Select all rows, two segments.  
tf.sparse_segment_sum(c, tf.constant([0, 1, 2]), tf.constant([0, 0, 1]))  
# => [[0 0 0 0]  
#      [5 6 7 8]]  
  
# Which is equivalent to:  
tf.segment_sum(c, tf.constant([0, 0, 1]))
```

Args:

- `data`: A `Tensor`. Must be one of the following types: `float32`, `float64`, `int32`, `int64`, `uint8`, `int16`, `int8`, `uint16`, `half`.
- `indices`: A `Tensor`. Must be one of the following types: `int32`, `int64`. A 1-D tensor. Has same rank as `segment_ids`.
- `segment_ids`: A `Tensor` of type `int32`. A 1-D tensor. Values should be sorted and can be repeated.
- `name`: A name for the operation (optional).

Returns:

A `Tensor` . Has the same type as `data` . Has same shape as data, except for dimension 0 which has size `k` , the number of segments.

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