

## tf.nn.top\_k

```
top_k(  
    input,  
    k=1,  
    sorted=True,  
    name=None  
)
```

Defined in [tensorflow/python/ops/nn\\_ops.py](#).

See the guide: [Neural Network > Evaluation](#)

Finds values and indices of the **k** largest entries for the last dimension.

If the input is a vector (rank-1), finds the **k** largest entries in the vector and outputs their values and indices as vectors. Thus **values[j]** is the **j**-th largest entry in **input**, and its index is **indices[j]**.

For matrices (resp. higher rank input), computes the top **k** entries in each row (resp. vector along the last dimension). Thus,

```
values.shape = indices.shape = input.shape[:-1] + [k]
```

If two elements are equal, the lower-index element appears first.

## Args:

- **input**: 1-D or higher **Tensor** with last dimension at least **k**.
- **k**: 0-D **int32 Tensor**. Number of top elements to look for along the last dimension (along each row for matrices).
- **sorted**: If true the resulting **k** elements will be sorted by the values in descending order.
- **name**: Optional name for the operation.

## Returns:

- **values**: The **k** largest elements along each last dimensional slice.
- **indices**: The indices of **values** within the last dimension of **input**.

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