tf.nn.in_top_k

```
in_top_k(
    predictions,
    targets,
    k,
    name=None
)
```

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

See the guide: Neural Network > Evaluation

Says whether the targets are in the top `K` predictions.

This outputs a `batch_size` bool array, an entry `out[i]` is `true` if the prediction for the target class is among the top `k` predictions among all predictions for example `i`. Note that the behavior of `InTopK` differs from the `TopK` op in its handling of ties; if multiple classes have the same prediction value and straddle the top-`k` boundary, all of those classes are considered to be in the top `k`.

More formally, let

$predictions_i$ be the predictions for all classes for example `i`, $targets_i$ be the target class for example `i`, out_i be the output for example `i`,

$$out_i = predictions_{i, targets_i} \in TopKIncludingTies(predictions_i)$$

Args:

- `predictions`: A `Tensor` of type `float32`. A `batch_size` x `classes` tensor.
- `targets`: A `Tensor`. Must be one of the following types: `int32`, `int64`. A `batch_size` vector of class ids.
- `k`: An `int`. Number of top elements to look at for computing precision.
- `name`: A name for the operation (optional).

Returns:

A `Tensor` of type `bool`. Computed Precision at `k` as a `bool Tensor`.

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