

## tf.invert\_permutation

```
invert_permutation(  
    x,  
    name=None  
)
```

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

See the guide: [Math > Sequence Comparison and Indexing](#)

Computes the inverse permutation of a tensor.

This operation computes the inverse of an index permutation. It takes a 1-D integer tensor `x`, which represents the indices of a zero-based array, and swaps each value with its index position. In other words, for an output tensor `y` and an input tensor `x`, this operation computes the following:

```
y[x[i]] = i for i in [0, 1, ..., len(x) - 1]
```

The values must include 0. There can be no duplicate values or negative values.

For example:

```
# tensor `x` is [3, 4, 0, 2, 1]  
invert_permutation(x) ==> [2, 4, 3, 0, 1]
```

## Args:

- `x`: A **Tensor**. Must be one of the following types: `int32`, `int64`. 1-D.
- `name`: A name for the operation (optional).

## Returns:

A **Tensor**. Has the same type as `x`. 1-D.

---

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](#)