# tf.NoGradient

## Aliases:

- `tf.NoGradient`
- `tf.NotDifferentiable`

```
NoGradient(op_type)
```

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

See the guide: Building Graphs > Defining new operations

Specifies that ops of type `op_type` is not differentiable.

This function should *not* be used for operations that have a well-defined gradient that is not yet implemented.

This function is only used when defining a new op type. It may be used for ops such as `tf.size()` that are not differentiable. For example:

```
tf.NotDifferentiable("Size")
```

The gradient computed for 'op_type' will then propagate zeros.

For ops that have a well-defined gradient but are not yet implemented, no declaration should be made, and an error *must* be thrown if an attempt to request its gradient is made.

## Args:

- `op_type`: The string type of an operation. This corresponds to the `OpDef.name` field for the proto that defines the operation.

## Raises:

- `TypeError`: If `op_type` is not a string.

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*Last updated November 2, 2017.*