tf.train.piecewise_constant

```
piecewise_constant(
    x,
    boundaries,
    values,
    name=None
)
```

Defined in `tensorflow/python/training/learning_rate_decay.py`.

See the guide: Training > Decaying the learning rate

Piecewise constant from boundaries and interval values.

Example: use a learning rate that's 1.0 for the first 100000 steps, 0.5 for steps 100001 to 110000, and 0.1 for any additional steps.

```
global_step = tf.Variable(0, trainable=False)
boundaries = [100000, 110000]
values = [1.0, 0.5, 0.1]
learning_rate = tf.train.piecewise_constant(global_step, boundaries, values)

# Later, whenever we perform an optimization step, we increment global_step.
```

Args:

- `x`: A 0-D scalar `Tensor`. Must be one of the following types: `float32`, `float64`, `uint8`, `int8`, `int16`, `int32`, `int64`.
- `boundaries`: A list of `Tensor`s or `int`s or `float`s with strictly increasing entries, and with all elements having the same type as `x`.
- `values`: A list of `Tensor`s or float`s or` int`s that specifies the values for the intervals defined by` boundaries`. It should have one more element than` boundaries`, and all elements should have the same type.
- `name`: A string. Optional name of the operation. Defaults to 'PiecewiseConstant'.

Returns:

A 0-D Tensor. Its value is `values[0]` when `x <= boundaries[0]`, `values[1]` when `x > boundaries[0]` and `x <= boundaries[1]`, ..., and values[-1] when `x > boundaries[-1]`.

Raises:

- `ValueError`: if types of `x` and `boundaries` do not match, or types of all `values` do not match.

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