tf.constant

```
constant(
    value,
    dtype=None,
    shape=None,
    name='Const',
    verify_shape=False
)
```

Defined in **tensorflow/python/framework/constant_op.py**.

See the guide: Constants, Sequences, and Random Values > Constant Value Tensors

Creates a constant tensor.

The resulting tensor is populated with values of type **dtype**, as specified by arguments **value** and (optionally) **shape** (see examples below).

The argument **value** can be a constant value, or a list of values of type **dtype**. If **value** is a list, then the length of the list must be less than or equal to the number of elements implied by the **shape** argument (if specified). In the case where the list length is less than the number of elements specified by **shape**, the last element in the list will be used to fill the remaining entries.

The argument **shape** is optional. If present, it specifies the dimensions of the resulting tensor. If not present, the shape of **value** is used.

If the argument **dtype** is not specified, then the type is inferred from the type of **value**.

For example:

```
# Constant 1-D Tensor populated with value list.
tensor = tf.constant([1, 2, 3, 4, 5, 6, 7]) => [1 2 3 4 5 6 7]

# Constant 2-D tensor populated with scalar value -1.
tensor = tf.constant(-1.0, shape=[2, 3]) => [[-1. -1. -1.]
                                             [-1. -1. -1.]]
```

Args:

- `value`: A constant value (or list) of output type `dtype`.
- `dtype`: The type of the elements of the resulting tensor.
- `shape`: Optional dimensions of resulting tensor.
- `name`: Optional name for the tensor.
- `verify_shape`: Boolean that enables verification of a shape of values.

Returns:

A Constant Tensor.

Raises:

- `TypeError`: if shape is incorrectly specified or unsupported.

Last updated November 2, 2017.