# tf.shape

```
shape(
    input,
    name=None,
    out_type=tf.int32
)
```

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

See the guide: Tensor Transformations > Shapes and Shaping

Returns the shape of a tensor.

This operation returns a 1-D integer tensor representing the shape of `input`.

For example:

```
t = tf.constant([[[1, 1, 1], [2, 2, 2]], [[3, 3, 3], [4, 4, 4]]])
tf.shape(t)  # [2, 2, 3]
```

## Args:

- `input`: A `Tensor` or `SparseTensor`.
- `name`: A name for the operation (optional).
- `out_type`: (Optional) The specified output type of the operation (`int32` or `int64`). Defaults to `tf.int32`.

## Returns:

A `Tensor` of type `out_type`.



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English