

## tf.range

```
range(limit, delta=1, dtype=None, name='range')  
range(start, limit, delta=1, dtype=None, name='range')
```

Defined in [tensorflow/python/ops/math\\_ops.py](#).

See the guide: [Constants, Sequences, and Random Values > Sequences](#)

Creates a sequence of numbers.

Creates a sequence of numbers that begins at **start** and extends by increments of **delta** up to but not including **limit**.

The dtype of the resulting tensor is inferred from the inputs unless it is provided explicitly.

Like the Python builtin **range**, **start** defaults to 0, so that **range(n) = range(0, n)**.

For example:

```
start = 3  
limit = 18  
delta = 3  
tf.range(start, limit, delta) # [3, 6, 9, 12, 15]  
  
start = 3  
limit = 1  
delta = -0.5  
tf.range(start, limit, delta) # [3, 2.5, 2, 1.5]  
  
limit = 5  
tf.range(limit) # [0, 1, 2, 3, 4]
```

### Args:

- **start**: A 0-D **Tensor** (scalar). Acts as first entry in the range if **limit** is not None; otherwise, acts as range limit and first entry defaults to 0.
- **limit**: A 0-D **Tensor** (scalar). Upper limit of sequence, exclusive. If None, defaults to the value of **start** while the first entry of the range defaults to 0.
- **delta**: A 0-D **Tensor** (scalar). Number that increments **start**. Defaults to 1.
- **dtype**: The type of the elements of the resulting tensor.
- **name**: A name for the operation. Defaults to "range".

### Returns:

An 1-D **Tensor** of type **dtype**.

numpy compatibility

Equivalent to np.arange

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