tf.abs

```
abs(
    x,
    name=None
)
```

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

See the guide: Math > Basic Math Functions

Computes the absolute value of a tensor.

Given a tensor `x` of complex numbers, this operation returns a tensor of type `float32` or `float64` that is the absolute value of each element in `x`. All elements in `x` must be complex numbers of the form *a* + *bj*. The absolute value is computed as $\sqrt{a^2 + b^2}$. For example:

```
x = tf.constant([[-2.25 + 4.75j], [-3.25 + 5.75j]])
tf.abs(x)  # [5.25594902, 6.60492229]
```

Args:

- `x`: A `Tensor` or `SparseTensor` of type `float32`, `float64`, `int32`, `int64`, `complex64` or `complex128`.
- `name`: A name for the operation (optional).

Returns:

A `Tensor` or `SparseTensor` the same size and type as `x` with absolute values. Note, for `complex64` or `complex128` input, the returned Tensor will be of type float32 or float64`, respectively.

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