tf.sparse_to_dense

```
sparse_to_dense(
    sparse_indices,
    output_shape,
    sparse_values,
    default_value=0,
    validate_indices=True,
    name=None
)
```

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

See the guide: Sparse Tensors > Conversion

Converts a sparse representation into a dense tensor.

Builds an array `dense` with shape `output_shape` such that

```
# If sparse_indices is scalar
dense[i] = (i == sparse_indices ? sparse_values : default_value)

# If sparse_indices is a vector, then for each i
dense[sparse_indices[i]] = sparse_values[i]

# If sparse_indices is an n by d matrix, then for each i in [0, n)
dense[sparse_indices[i][0], ..., sparse_indices[i][d-1]] = sparse_values[i]
```

All other values in `dense` are set to `default_value`. If `sparse_values` is a scalar, all sparse indices are set to this single value.

Indices should be sorted in lexicographic order, and indices must not contain any repeats. If `validate_indices` is True, these properties are checked during execution.

Args:

- `sparse_indices`: A 0-D, 1-D, or 2-D `Tensor` of type `int32` or `int64`. `sparse_indices[i]` contains the complete index where `sparse_values[i]` will be placed.
- `output_shape`: A 1-D `Tensor` of the same type as `sparse_indices`. Shape of the dense output tensor.
- `sparse_values`: A 0-D or 1-D `Tensor`. Values corresponding to each row of `sparse_indices`, or a scalar value to be used for all sparse indices.
- `default_value`: A 0-D `Tensor` of the same type as `sparse_values`. Value to set for indices not specified in `sparse_indices`. Defaults to zero.
- `validate_indices`: A boolean value. If True, indices are checked to make sure they are sorted in lexicographic order and that there are no repeats.
- `name`: A name for the operation (optional).

Returns:

Dense `Tensor` of shape `output_shape`. Has the same type as `sparse_values`.

Last updated November 2, 2017.