

## tf.contrib.layers.sparse\_column\_with\_keys

```
sparse_column_with_keys(  
    column_name,  
    keys,  
    default_value=-1,  
    combiner='sum',  
    dtype=tf.string  
)
```

Defined in [tensorflow/contrib/layers/python/layers/feature\\_column.py](#).

See the guide: [Layers \(contrib\) > Feature columns](#)

Creates a `_SparseColumn` with keys.

Look up logic is as follows: `lookup_id = index_of_feature_in_keys` if feature in keys else `default_value`

### Args:

- `column_name`: A string defining sparse column name.
- `keys`: A list or tuple defining vocabulary. Must be castable to `dtype`.
- `default_value`: The value to use for out-of-vocabulary feature values. Default is -1.
- `combiner`: A string specifying how to reduce if the sparse column is multivalent. Currently "mean", "sqrtn" and "sum" are supported, with "sum" the default. "sqrtn" often achieves good accuracy, in particular with bag-of-words columns.
  - "sum": do not normalize features in the column
  - "mean": do l1 normalization on features in the column
  - "sqrtn": do l2 normalization on features in the column For more information: [tf.embedding\\_lookup\\_sparse](#).
- `dtype`: Type of features. Only integer and string are supported.

### Returns:

A `_SparseColumnKeys` with keys configuration.

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