tf.dynamic_partition

```
dynamic_partition(
    data,
    partitions,
    num_partitions,
    name=None
)
```

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

See the guide: Tensor Transformations > Slicing and Joining

Partitions `data` into `num_partitions` tensors using indices from `partitions`.

For each index tuple `js` of size `partitions.ndim`, the slice `data[js, ...]` becomes part of `outputs[partitions[js]]`. The slices with `partitions[js] = i` are placed in `outputs[i]` in lexicographic order of `js`, and the first dimension of `outputs[i]` is the number of entries in `partitions` equal to `i`. In detail,

```
    outputs[i].shape = [sum(partitions == i)] + data.shape[partitions.ndim:]

    outputs[i] = pack([data[js, ...] for js if partitions[js] == i])
```

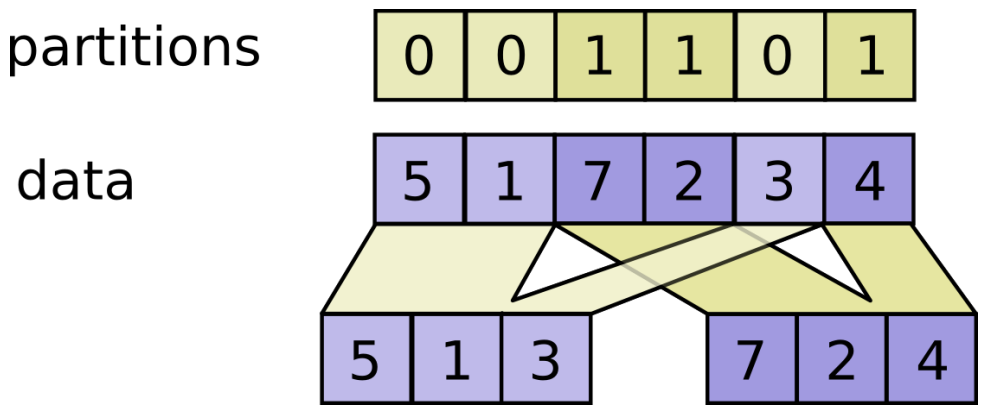
`data.shape` must start with `partitions.shape`.

For example:

```
    # Scalar partitions.
    partitions = 1
    num_partitions = 2
    data = [10, 20]
    outputs[0] = []  # Empty with shape [0, 2]
    outputs[1] = [[10, 20]]

    # Vector partitions.
    partitions = [0, 0, 1, 1, 0]
    num_partitions = 2
    data = [10, 20, 30, 40, 50]
    outputs[0] = [10, 20, 50]
    outputs[1] = [30, 40]
```

See `dynamic_stitch` for an example on how to merge partitions back.



Args:

- `data`: A `Tensor`.
- `partitions`: A `Tensor` of type `int32`. Any shape. Indices in the range `[0, num_partitions)`.
- `num_partitions`: An `int` that is `>= 1`. The number of partitions to output.
- `name`: A name for the operation (optional).

Returns:

A list of `num_partitions` `Tensor` objects with the same type as `data`.

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