# tf.required_space_to_batch_paddings

```
required_space_to_batch_paddings(
    input_shape,
    block_shape,
    base_paddings=None,
    name=None
)
```

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

See the guide: Tensor Transformations > Slicing and Joining

Calculate padding required to make block_shape divide input_shape.

This function can be used to calculate a suitable paddings argument for use with space_to_batch_nd and batch_to_space_nd.

## Args:

- `input_shape`: int32 Tensor of shape [N].
- `block_shape`: int32 Tensor of shape [N].
- `base_paddings`: Optional int32 Tensor of shape [N, 2]. Specifies the minimum amount of padding to use. All elements must be >= 0. If not specified, defaults to 0.
- `name`: string. Optional name prefix.

## Returns:

(paddings, crops), where:

**`paddings`** and **`crops`** are int32 Tensors of rank 2 and shape [N, 2] * `satisfying`: paddings[i, 0] = base_paddings[i, 0]. 0 <= paddings[i, 1] - base_paddings[i, 1] < block_shape[i] (input_shape[i] + paddings[i, 0] + paddings[i, 1]) % block_shape[i] == 0

```
  crops[i, 0] = 0
  crops[i, 1] = paddings[i, 1] - base_paddings[i, 1]
```

Raises: ValueError if called with incompatible shapes.

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*Last updated November 2, 2017.*