# Tensorflow函数：tf.where

官方API：

tf.where(input, name=None)`

Returns locations of true values in a boolean tensor.

This operation returns the coordinates of true elements in input. The coordinates are returned in a 2-D tensor where the first dimension (rows) represents the number of true elements, and the second dimension (columns) represents the coordinates of the true elements. Keep in mind, the shape of the output tensor can vary depending on how many true values there are in input. Indices are output in row-major order.

For example:

# 'input' tensor is [[True, False]

# [True, False]]

# 'input' has two true values, so output has two coordinates.

# 'input' has rank of 2, so coordinates have two indices.

where(input) ==> [[0, 0],

[1, 0]]

其中[0, 0]表示第一个true的坐标为第0行第0列；[1, 0]表示第二个true的坐标为第1行第0列

# `input` tensor is [[[True, False]

# [True, False]]

# [[False, True]

# [False, True]]

# [[False, False]

# [False, True]]]

# 'input' has 5 true values, so output has 5 coordinates.

# 'input' has rank of 3, so coordinates have three indices.

where(input) ==> [[0, 0, 0],

[0, 1, 0],

[1, 0, 1],

[1, 1, 1],

[2, 1, 1]]

其中[0, 0, 0]表示第1个true所在的位置为第0个矩阵中的第0行第0列；[1, 0, 1]表示第3个true所在的位置为第1个矩阵中的第0行第1列；后面的以此类推。