[concept]

In tensorflow, all points(tensors) you create are in the default graph. No matter where you call the operation.

e.g In class a: <op\_create\_tensor>

In class b: <op\_create\_tensor>   
 they will appear in the same graph

Each Tensorflow session has its specific graph.

[muli-graph]

g1 = tf.Graph()

with g1.as\_default():

# every thing declare in this domain belong to graph g1

a = tf.placeholder(…)

b = tf.Varaible(…)

out = a+b # a,b,out are all placed in graph g1

sess1 = tf.Session() # sess1’s graph is g1

sess1.run(tf.global\_variable\_initializer()) # all veriable initializer should be call in the graph domain

c = tf.Variable(...) # c will be placed in default graph, which is different from g1

sess2.run(tf.global\_variable\_initializer())

sess2.run(out, …) # session cannot run tensors that don’t belong to its graph