```
# Copyright 2019 Google Inc.

# Licensed under the Apache License, Version 2.0 (the "License");
# you may not use this file except in compliance with the License.
# You may obtain a copy of the License at

#     http://www.apache.org/licenses/LICENSE-2.0

# Unless required by applicable law or agreed to in writing, software
# distributed under the License is distributed on an "AS IS" BASIS,
# WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
# See the License for the specific language governing permissions and
# limitations under the License.
```


Open in Colab

Detecting Hate speech Tweets with BERT on TF Hub

We are using bert-tensorflow for this classification task. At the moment I'm making sure it's tenso
because tensorflow version 2 gives issues with Bert at the moment. I believe Tensorflow hopes to
resolved in tensorflow v 2.1

We are using a TPU as a GPU does not have the required memory for Large BERT models- it can o
base model. We'll see if there a TPU detected and we'll set it to a global environment variable so it
by our BERT functions later.

```
%pip install bert-tensorflow
from sklearn.model_selection import train_test_split
import pandas as pd
import numpy as np
#import pkg_resources

#Make sure to use tensorflow version 1.x, version 2 doesn't work with bert
%tensorflow_version 1.x
import tensorflow as tf
import os

import html
import re
import json
import pprint
import random
import string
import tensorflow_hub as hub
from datetime import datetime

import bert
from bert import run_classifier
from bert import optimization
```

```
from bert import optimization
from bert import tokenization

import json

import pprint
import random
import string

assert 'COLAB_TPU_ADDR' in os.environ, 'ERROR: Not connected to a TPU runtime; please see
TPU_ADDRESS = 'grpc://' + os.environ['COLAB_TPU_ADDR']
print('TPU address is', TPU_ADDRESS)

from google.colab import auth
auth.authenticate_user()
with tf.Session(TPU_ADDRESS) as session:
  print('TPU devices:')
  pprint.pprint(session.list_devices())

  # Upload credentials to TPU.
  with open('/content/adc.json', 'r') as f:
    auth_info = json.load(f)
  tf.contrib.cloud.configure_gcs(session, credentials=auth_info)

USE_TPU=True
try:
  # This address identifies the TPU we'll use when configuring TensorFlow.
  TPU_WORKER = 'grpc://' + os.environ['COLAB_TPU_ADDR']
  tf.config.experimental_connect_to_host(TPU_WORKER)
except Exception as ex:
  print(ex)
  USE_TPU=False

print("        USE_TPU:", USE_TPU)
print("Eager Execution:", tf.executing_eagerly())

assert not tf.executing_eagerly(), "Eager execution on TPUs have issues currently"
```

Setting a random seed for reproducability

```
tf.reset_default_graph()

tf.set_random_seed(0)

random.seed(0)

np.random.seed(0)
```

```
DeviceAttributes(/job:tpu_worker/replica:0/task:0/device:TPU:6, TPU, 17179869184, 3
```

Below we will set the directory where we will store our output model. To ensure the right variables run config function later, our ouput directory must be in the same directory as our pre-trained bert

Set DO_DELETE to rewrite the OUTPUT_DIR if it exists. Otherwise, Tensorflow will load existing mo from that directory (if they exist).

```
#Choose which model you'd like -
#MUST be in GCP bucket

#Bert uncased Large
#bert_model_name = 'uncased_L-24_H-1024_A-16'

#Large whole word masking
bert_model_name = 'wwm_uncased_L-24_H-1024_A-16'

#Base model
#bert_model_name = 'uncased_L-12_H-768_A-12'

output_dir = \
os.path.join(bert_model_name, 'output')

#@markdown Whether or not to clear/delete the dire
DO_DELETE = True #@param {type:"boolean"}
#@markdown Set USE_BUCKET and BUCKET if you want t
USE_BUCKET = True #@param {type:"boolean"}
BUCKET = 'csc3002' #@param {type:"string"}

if USE_BUCKET:
  OUTPUT_DIR = 'gs://{}/{}'.format(BUCKET, output_
  from google.colab import auth
  auth.authenticate_user()

if DO_DELETE:
  try:
    tf.gfile.DeleteRecursively(OUTPUT_DIR)
  except:
    # Doesn't matter if the directory didn't exist
    pass
tf.gfile.MakeDirs(OUTPUT_DIR)
print('***** Model output directory: {} *****'.for
```

Whether or not to clear/delete the direc create a new one

DO_DELETE: ☑

Set USE_BUCKET and BUCKET if you w (optionally) store model output on GCF

USE_BUCKET: ☑

BUCKET: " csc3002

```
***** Model output directory: gs://csc3002/wwm_uncased_L-24_H-1024_A-16/output *****
```

Data

I've stored the dataset in my google drive for ease of access, authentication will have to be provide

```
from google.colab import drive
drive.mount('/content/drive')

#For analytics vidhya
data = '/content/drive/My Drive/trial/train_E6oV3lV.csv'
data = pd.read_csv(data, sep=',',  index_col = False, encoding = 'utf-8')

#For HatEval
"""data = '/content/drive/My Drive/hateval2019/hateval2019_en_train.csv'
data = pd.read_csv(data, sep=',',  index_col = False, encoding = 'utf-8')
data.rename(columns={'text': 'tweet', 'HS': 'label'}, inplace=True)"""


data.head()
```

```
Drive already mounted at /content/drive; to attempt to forcibly remount, call drive.m
```

	id	label	tweet
0	1	0	@user when a father is dysfunctional and is s...
1	2	0	@user @user thanks for #lyft credit i can't us...
2	3	0	bihday your majesty
3	4	0	#model i love u take with u all the time in ...
4	5	0	factsguide: society now #motivation

We store the name of the Data column containing the text we wish to classify and the name of the label column in global variables for ease of access down line and also so this code is generalizabl just a 0 or a 1 because the version of BERT we've created below only deals in binary classifcation a be ints

```
print(data.label.value_counts(), "\n")
data.info()
```

```
0    29720
1     2242
Name: label, dtype: int64

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 31962 entries, 0 to 31961
Data columns (total 3 columns):
id       31962 non-null int64
label    31962 non-null int64
tweet    31962 non-null object
dtypes: int64(2), object(1)
memory usage: 749.2+ KB
```

Text Pre-Processing

```
def preprocess(text_string):
    """
    Accepts a text string and:
    1) Removes URLS
    2) lots of whitespace with one instance
    3) Removes mentions
    4) Uses the html.unescape() method to convert unicode to text counterpart
    5) Replace & with and
    6) Remove the fact the tweet is a retweet if it is - knowing the tweet is
       a retweet does not help towards our classification task.
    This allows us to get standardized counts of urls and mentions
    Without caring about specific people mentioned
    """
    space_pattern = '\s+'
    giant_url_regex = ('http[s]?://(?:[a-zA-Z]|[0-9]|[#$-_@.&+]|'
        '[!*\(\),]|(?:%[0-9a-fA-F][0-9a-fA-F]))+')
    mention_regex = '@[\w\-]+'
    RT_regex = '(RT|rt)[ ]*@[ ]*[\S]+'

    # Replaces urls with URL
    parsed_text = re.sub(giant_url_regex, '', text_string)

    # Remove the fact the tweet is a retweet.
    # (we're only interested in the language of the tweet here)
    parsed_text = re.sub(RT_regex, ' ', parsed_text)

    # Removes mentions as they're redundant information
    parsed_text = re.sub(mention_regex, '',  parsed_text)

    # Converting unicode within tweet to text
    parsed_text = html.unescape(parsed_text)

    #Replace '&' with 'and' - might as well
    parsed_text = parsed_text.replace(r'&', r'and')

    #Remove excess whitespace at the end
    parsed_text = re.sub(space_pattern, ' ', parsed_text)
```

```
    #Set text to lowercase and strip
    parsed_text = parsed_text.lower()
    parsed_text = parsed_text.strip()

    return parsed_text
```

Let's see what it looks like

```
testtweet = data['tweet'][2100]
```

```
print("Original:", testtweet)
print("\nPreprocessed:", preprocess(testtweet))
```

```
Original: @user i cannot imagine being in the shoes of local law-enforcement and firs

Preprocessed: i cannot imagine being in the shoes of local law-enforcement and first
```

```
data['tweet'] = data['tweet'].apply(preprocess)
```

Splitting data into train and dev. Also specifying label and te

```
#For analyticsvidhya
train, test = train_test_split(data, test_size=0.20, random_state=42)

#For HatEval
"""train = data
test = '/content/drive/My Drive/hateval2019/hateval2019_en_dev.csv'
test =  pd.read_csv(test, sep=',',  index_col = False, encoding = 'utf-8')
test.rename(columns={'text': 'tweet', 'HS': 'label'}, inplace=True)
test['tweet'] = test['tweet'].apply(preprocess)"""

DATA_COLUMN = 'tweet'
LABEL_COLUMN = 'label'
# label_list is the list of labels, i.e. True, False or 0, 1 or 'dog', 'cat'
label_list = [0, 1]
```

Data Preprocessing

We'll need to transform our data into a format BERT understands. This involves two steps. First, w `InputExample`'s using the constructor provided in the BERT library.

- `text_a` is the text we want to classify, which in this case, is the `tweet` field in our Dataframe
- `text_b` is used if we're training a model to understand the relationship between sentences (i translation of `text_a`? Is `text_b` an answer to the question asked by `text_a`?). This doesn't task, so we can leave `text_b` blank.

- `label` is the label for our example, i.e. True, False

```
# Use the InputExample class from BERT's run_classifier code to create examples from the d
train_InputExamples = train.apply(lambda x: bert.run_classifier.InputExample(guid=None, #
                                                                   text_a = x[DATA_COLUMN]
                                                                   text_b = None,
                                                                   label = x[LABEL_COLUMN]

test_InputExamples = test.apply(lambda x: bert.run_classifier.InputExample(guid=None,
                                                                   text_a = x[DATA_COLUMN]
                                                                   text_b = None,
                                                                   label = x[LABEL_COLUMN]
```

Next, we need to preprocess our data so that it matches the data BERT was trained on. For this, w
couple of things (but don't worry--this is also included in the Python library):

1. Tokenize it (i.e. "sally says hi" -> ["sally", "says", "hi"])
2. Break words into WordPieces (i.e. "calling" -> ["call", "##ing"])
3. Map our words to indexes using a vocab file that BERT provides
4. Add special "CLS" and "SEP" tokens (see the readme)
5. Append "index" and "segment" tokens to each input (see the BERT paper)

Happily, we don't have to worry about most of these details. It's automated with the below inbuilt f

Below is a way to retrieve desired BERT parameters, such as it's pre-trained checkpoints and it's vc
google storage bucket where I've downloaded the uncased LARGE version of bert.

```
bucket_dir = 'gs://csc3002'

bert_ckpt_dir = os.path.join(bucket_dir, bert_model_name)

bert_ckpt_file   = os.path.join(bert_ckpt_dir, "bert_model.ckpt")
bert_config_file = os.path.join(bert_ckpt_dir, "bert_config.json")
vocab_file = os.path.join(bert_ckpt_dir, "vocab.txt")

print("Using BERT checkpoint from:", bert_ckpt_dir)

tokenizer = bert.tokenization.FullTokenizer(vocab_file=vocab_file)
tokenizer.tokenize("This here's an example of using the BERT tokenizer")
```

Using our tokenizer, we'll call `run_classifier.convert_examples_to_features` on our InputExamp them into features BERT understands.

```
# BERT is limited to 512 tokens in length
MAX_SEQ_LENGTH = 256
# Convert our train and test features to InputFeatures that BERT understands.
train_features =  bert.run_classifier.convert_examples_to_features(train_InputExamples, la
test_features = bert.run_classifier.convert_examples_to_features(test_InputExamples, label
```

```
INFO:tensorflow:Writing example 0 of 25569
INFO:tensorflow:*** Example ***
INFO:tensorflow:guid: None
INFO:tensorflow:tokens: [CLS] because i ' ve been paying attention for the past year
INFO:tensorflow:input_ids: 101 2138 1045 1005 2310 2042 7079 3086 2005 1996 2627 2095
INFO:tensorflow:input_mask: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 0 0 0 0
INFO:tensorflow:segment_ids: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
INFO:tensorflow:label: 1 (id = 1)
INFO:tensorflow:*** Example ***
INFO:tensorflow:guid: None
INFO:tensorflow:tokens: [CLS] raft building at salford quay ##s as pa of the gm ##w f
INFO:tensorflow:input_ids: 101 21298 2311 2012 23001 21048 2015 2004 6643 1997 1996 1
INFO:tensorflow:input_mask: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0
INFO:tensorflow:segment_ids: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
INFO:tensorflow:label: 0 (id = 0)
INFO:tensorflow:*** Example ***
INFO:tensorflow:guid: None
INFO:tensorflow:tokens: [CLS] friday ð ð » # g ##de ##gb ##log # friday # self ##ie #
INFO:tensorflow:input_ids: 101 5958 1098 1098 1090 1001 1043 3207 18259 21197 1001 59
INFO:tensorflow:input_mask: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
INFO:tensorflow:segment_ids: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
INFO:tensorflow:label: 0 (id = 0)
INFO:tensorflow:*** Example ***
INFO:tensorflow:guid: None
INFO:tensorflow:tokens: [CLS] # fashion it is a true # fact [SEP]
INFO:tensorflow:input_ids: 101 1001 4827 2009 2003 1037 2995 1001 2755 102 0 0 0 0 0
INFO:tensorflow:input_mask: 1 1 1 1 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
INFO:tensorflow:segment_ids: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
INFO:tensorflow:label: 0 (id = 0)
INFO:tensorflow:*** Example ***
INFO:tensorflow:guid: None
INFO:tensorflow:tokens: [CLS] so to # share the # simple , # elegant # business ##car
INFO:tensorflow:input_ids: 101 2061 2000 1001 3745 1996 1001 3722 1010 1001 11552 100
INFO:tensorflow:input_mask: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 0 0 0
INFO:tensorflow:segment_ids: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
INFO:tensorflow:label: 0 (id = 0)
INFO:tensorflow:Writing example 10000 of 25569
INFO:tensorflow:Writing example 20000 of 25569
INFO:tensorflow:Writing example 0 of 6393
INFO:tensorflow:*** Example ***
INFO:tensorflow:guid: None
INFO:tensorflow:tokens: [CLS] amy mom says my smile is capt ##ivating ##a ##¦ i says
INFO:tensorflow:input_ids: 101 6864 3566 2758 2026 2868 2003 14408 17441 2050 29649 1
INFO:tensorflow:input_mask: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
INFO:tensorflow:segment_ids: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
INFO:tensorflow:label: 0 (id = 0)
INFO:tensorflow:*** Example ***
INFO:tensorflow:guid: None
INFO:tensorflow:tokens: [CLS] in 3 days i will be meeting my sis - n - law , co ##une
INFO:tensorflow:input_ids: 101 1999 1017 2420 1045 2097 2022 3116 2026 24761 1011 105
INFO:tensorflow:input_mask: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
INFO:tensorflow:segment_ids: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
INFO:tensorflow:label: 0 (id = 0)
INFO:tensorflow:*** Example ***
INFO:tensorflow:guid: None
INFO:tensorflow:tokens: [CLS] hating the conservative homo ##ph ##obe ##s using this
INFO:tensorflow:input_ids: 101 22650 1996 4603 24004 8458 20891 2015 2478 2023 10576
INFO:tensorflow:input_mask: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
INFO:tensorflow:segment_ids: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
INFO:tensorflow:label: 0 (id = 0)
INFO:tensorflow:*** Example ***
```

```
INFO:tensorflow:guid: None
INFO:tensorflow:tokens: [CLS] awe ##e if this doesn ' t # scream # friday # ace ##wel
INFO:tensorflow:input_ids: 101 15180 2063 2065 2023 2987 1005 1056 1001 6978 1001 595
INFO:tensorflow:input_mask: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
INFO:tensorflow:segment_ids: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
INFO:tensorflow:label: 0 (id = 0)
INFO:tensorflow:*** Example ***
INFO:tensorflow:guid: None
INFO:tensorflow:tokens: [CLS] fathers ##day # father ##a ##¢ ##aa ##s # day # god ! #
INFO:tensorflow:input_ids: 101 11397 10259 1001 2269 2050 29645 11057 2015 1001 2154
INFO:tensorflow:input_mask: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
INFO:tensorflow:segment_ids: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
INFO:tensorflow:label: 0 (id = 0)
```

Creating a model

Now that we've prepared our data, let's focus on building a model. `create_model` does just this be
the BERT tf hub module again (this time to extract the computation graph). Next, it creates a singl
will be trained to adapt BERT to our task (i.e. classifying whether a tweet is hate speech or not). Th
using a mostly trained model is called fine-tuning.

```
#BERT_MODEL_HUB = "https://tfhub.dev/google/bert_uncased_L-12_H-768_A-12/1"
#BERT_MODEL_HUB = "https://tfhub.dev/google/bert_uncased_L-24_H-1024_A-16/1" #Large uncase


BERT_MODEL_HUB = "https://tfhub.dev/tensorflow/bert_en_wwm_uncased_L-24_H-1024_A-16/1" #La

def create_model(is_predicting, input_ids, input_mask, segment_ids, labels,
                 num_labels):
  """Creates a classification model."""

  bert_module = hub.Module(
      BERT_MODEL_HUB,
      trainable=True)

  bert_inputs = dict(
      input_ids=input_ids,
      input_mask=input_mask,
      segment_ids=segment_ids)

  bert_outputs = bert_module(
      inputs=bert_inputs,
      signature="tokens",
      as_dict=True)

  # Use "pooled_output" for classification tasks on an entire sentence.
  # Use "sequence_outputs" for token-level output.
  output_layer = bert_outputs["pooled_output"]

  hidden_size = output_layer.shape[-1].value
```

```
  # Create our own layer to tune for politeness data.
  output_weights = tf.get_variable(
      "output_weights", [num_labels, hidden_size],
      initializer=tf.truncated_normal_initializer(stddev=0.02))

  output_bias = tf.get_variable(
      "output_bias", [num_labels], initializer=tf.zeros_initializer())

  with tf.variable_scope("loss"):

    # Dropout helps prevent overfitting
    output_layer = tf.nn.dropout(output_layer, keep_prob=0.9)

    logits = tf.matmul(output_layer, output_weights, transpose_b=True)
    logits = tf.nn.bias_add(logits, output_bias)
    log_probs = tf.nn.log_softmax(logits, axis=-1)

    # Convert labels into one-hot encoding
    one_hot_labels = tf.one_hot(labels, depth=num_labels, dtype=tf.float32)

    predicted_labels = tf.squeeze(tf.argmax(log_probs, axis=-1, output_type=tf.int32))
    # If we're predicting, we want predicted labels and the probabiltiies.
    if is_predicting:
      return (predicted_labels, log_probs)

    # If we're train/eval, compute loss between predicted and actual label
    per_example_loss = -tf.reduce_sum(one_hot_labels * log_probs, axis=-1)
    loss = tf.reduce_mean(per_example_loss)
    return (loss, predicted_labels, log_probs)
```

Next we'll wrap our model function in a `model_fn_builder` function that adapts our model to work evaluation, and prediction.

```
# model_fn_builder actually creates our model function
# using the passed parameters for num_labels, learning_rate, etc.
def model_fn_builder(num_labels, learning_rate, num_train_steps,
                     num_warmup_steps):
  """Returns `model_fn` closure for TPUEstimator."""
  def model_fn(features, labels, mode, params):  # pylint: disable=unused-argument
    """The `model_fn` for TPUEstimator."""

    input_ids = features["input_ids"]
    input_mask = features["input_mask"]
    segment_ids = features["segment_ids"]
    label_ids = features["label_ids"]

    is_predicting = (mode == tf.estimator.ModeKeys.PREDICT)

    # TRAIN and EVAL
    if not is_predicting:


      (loss, predicted_labels, log_probs) = create_model(
```

```
  is_predicting, input_ids, input_mask, segment_ids, label_ids, num_labels)


train_op = tf.contrib.tpu.CrossShardOptimizer(bert.optimization.create_optimizer(
    loss, learning_rate, num_train_steps, num_warmup_steps, use_tpu=True))



  # Calculate evaluation metrics.
def metric_fn(label_ids, predicted_labels):
  accuracy = tf.metrics.accuracy(label_ids, predicted_labels)
  f1_score = tf.contrib.metrics.f1_score(
      label_ids,
      predicted_labels)
  auc = tf.metrics.auc(
      label_ids,
      predicted_labels)
  recall = tf.metrics.recall(
      label_ids,
      predicted_labels)
  precision = tf.metrics.precision(
      label_ids,
      predicted_labels)
  true_pos = tf.metrics.true_positives(
      label_ids,
      predicted_labels)
  true_neg = tf.metrics.true_negatives(
      label_ids,
      predicted_labels)
  false_pos = tf.metrics.false_positives(
      label_ids,
      predicted_labels)
  false_neg = tf.metrics.false_negatives(
      label_ids,
      predicted_labels)
  return {
      "eval_accuracy": accuracy,
      "f1_score": f1_score,
      "auc": auc,
      "precision": precision,
      "recall": recall,
      "true_positives": true_pos,
      "true_negatives": true_neg,
      "false_positives": false_pos,
      "false_negatives": false_neg
  }

eval_metrics = metric_fn(label_ids, predicted_labels)

if mode == tf.estimator.ModeKeys.TRAIN:

  return tf.estimator.TPUEstimatorSpec(mode=mode,
    loss=loss,
    train_op=train_op)
else:
```

```
        #Maybe we'll use the CPU for evaluation, TPU is tricky with giving evaluation metr
        return tf.estimator.TPUEstimatorSpec(mode=mode,
            loss=loss,
            eval_metrics_ops = eval_metrics)
    else:
      (predicted_labels, log_probs) = create_model(
        is_predicting, input_ids, input_mask, segment_ids, label_ids, num_labels)

      predictions = {
          'probabilities': log_probs,
          'labels': predicted_labels
      }

      return tpu.estimator.TPUEstimatorSpec(mode = mode, predictions = predictions)
  # Return the actual model function in the closure
  return model_fn
```

Model and Config Parameters

```
# Compute train and warmup steps from batch size
# These hyperparameters are copied from this colab notebook (https://colab.sandbox.google.
TRAIN_BATCH_SIZE = 16 #recommended 16 or 32
EVAL_BATCH_SIZE = 16
PREDICT_BATCH_SIZE = 8
LEARNING_RATE = 2e-5 # Recommended 5e-5, 3e-5 or 2e-5
NUM_TRAIN_EPOCHS = 3.0 # Recommended 2, 3 or 4
MAX_SEQ_LENGTH = 256
# Warmup is a period of time where the learning rate
#is small and gradually increases--usually helps training.
WARMUP_PROPORTION = 0.1

# Compute # train and warmup steps from batch size
num_train_steps = int(len(train_features) / TRAIN_BATCH_SIZE * NUM_TRAIN_EPOCHS)
num_warmup_steps = int(num_train_steps * WARMUP_PROPORTION)

# Model configs
SAVE_CHECKPOINTS_STEPS = 1000
```

```
print("The model will stop training when it reaches", num_train_steps, "as a checkpoint")
print("\nThe bert checkpoint directory is", bert_ckpt_dir)
print("\nThe output directory is", OUTPUT_DIR)
```

```
The model will stop training when it reaches 9588 as a checkpoint

The bert checkpoint directory is gs://csc3002/wwm_uncased_L-24_H-1024_A-16

The output directory is gs://csc3002/wwm_uncased_L-24_H-1024_A-16/output
```

Below are TPU model functions

```
cluster = tf.contrib.cluster_resolver.TPUClusterResolver(TPU_ADDRESS)

#Another cluster function - let's see how it does
"""cluster=tpu_cluster_resolver, session_config=tf.ConfigProto( \
    allow_soft_placement=False, log_device_placement=True), \
    tpu_config=tf.contrib.tpu.TPUConfig(iterations_per_loop=500)"""

run_config = tf.contrib.tpu.RunConfig(
    #I think the output file must be a sub-directory of the main BERT file
    model_dir=OUTPUT_DIR,
    cluster=cluster,
    #master=TPU_ADDRESS,
    save_checkpoints_steps=SAVE_CHECKPOINTS_STEPS,
    tpu_config=tf.contrib.tpu.TPUConfig(
        iterations_per_loop=500,
        num_shards=8,
        per_host_input_for_training=tf.contrib.tpu.InputPipelineConfig.PER_HOST_V2))


model_fn = run_classifier.model_fn_builder(
    bert_config= run_classifier.modeling.BertConfig.from_json_file(bert_config_file),
    num_labels=len(label_list),
    init_checkpoint=bert_ckpt_file,
    learning_rate=LEARNING_RATE,
    num_train_steps=num_train_steps,
    num_warmup_steps=num_warmup_steps,
    use_tpu=True,
    use_one_hot_embeddings=True)

estimator = tf.contrib.tpu.TPUEstimator(
    use_tpu=True,
    model_fn=model_fn,
    config=run_config,
    train_batch_size=TRAIN_BATCH_SIZE,
    eval_batch_size=EVAL_BATCH_SIZE,
    predict_batch_size=PREDICT_BATCH_SIZE)
```

```
WARNING:tensorflow:Estimator's model_fn (<function model_fn_builder.<locals>.model_fn
INFO:tensorflow:Using config: {'_model_dir': 'gs://csc3002/wwm_uncased_L-24_H-1024_A-
cluster_def {
  job {
    name: "worker"
    tasks {
      key: 0
      value: "10.68.2.10:8470"
    }
  }
}
isolate_session_state: true
, '_keep_checkpoint_max': 5, '_keep_checkpoint_every_n_hours': 10000, '_log_step_coun
INFO:tensorflow:_TPUContext: eval_on_tpu True
```

Next we create an input builder function that takes our training feature set (`train_features`) and p
generator. This is a pretty standard design pattern for working with Tensorflow Estimators.

```
# Create an input function for training. drop_remainder = True for using TPUs.
train_input_fn = bert.run_classifier.input_fn_builder(
    features=train_features,
    seq_length=MAX_SEQ_LENGTH,
    is_training=True,
    drop_remainder=True)
```

Now we train our model! Can take anywhere between 15 mins to an hour depening on params

```
print("The model will stop training when it reaches", num_train_steps, "as a checkpoint\n"
print(f'Beginning Training!')
current_time = datetime.now()
estimator.train(input_fn=train_input_fn, max_steps=num_train_steps)
print("Training took time ", datetime.now() - current_time)
```

```
The model will stop training when it reaches 9588 as a checkpoint

Beginning Training!
INFO:tensorflow:Querying Tensorflow master (grpc://10.68.2.10:8470) for TPU system me
INFO:tensorflow:Found TPU system:
INFO:tensorflow:*** Num TPU Cores: 8
INFO:tensorflow:*** Num TPU Workers: 1
INFO:tensorflow:*** Num TPU Cores Per Worker: 8
INFO:tensorflow:*** Available Device: _DeviceAttributes(/job:worker/replica:0/task:0/
INFO:tensorflow:*** Available Device: _DeviceAttributes(/job:worker/replica:0/task:0/
INFO:tensorflow:*** Available Device: _DeviceAttributes(/job:worker/replica:0/task:0/
INFO:tensorflow:*** Available Device: _DeviceAttributes(/job:worker/replica:0/task:0/
INFO:tensorflow:*** Available Device: _DeviceAttributes(/job:worker/replica:0/task:0/
INFO:tensorflow:*** Available Device: _DeviceAttributes(/job:worker/replica:0/task:0/
INFO:tensorflow:*** Available Device: _DeviceAttributes(/job:worker/replica:0/task:0/
INFO:tensorflow:*** Available Device: _DeviceAttributes(/job:worker/replica:0/task:0/
INFO:tensorflow:*** Available Device: _DeviceAttributes(/job:worker/replica:0/task:0/
INFO:tensorflow:*** Available Device: _DeviceAttributes(/job:worker/replica:0/task:0/
INFO:tensorflow:*** Available Device: _DeviceAttributes(/job:worker/replica:0/task:0/
INFO:tensorflow:Calling model_fn.
INFO:tensorflow:*** Features ***
INFO:tensorflow:  name = input_ids, shape = (1, 256)
INFO:tensorflow:  name = input_mask, shape = (1, 256)
INFO:tensorflow:  name = label_ids, shape = (1,)
INFO:tensorflow:  name = segment_ids, shape = (1, 256)
INFO:tensorflow:**** Trainable Variables ****
INFO:tensorflow:  name = bert/embeddings/word_embeddings:0, shape = (30522, 1024), *I
INFO:tensorflow:  name = bert/embeddings/token_type_embeddings:0, shape = (2, 1024),
INFO:tensorflow:  name = bert/embeddings/position_embeddings:0, shape = (512, 1024),
INFO:tensorflow:  name = bert/embeddings/LayerNorm/beta:0, shape = (1024,), *INIT_FRO
INFO:tensorflow:  name = bert/embeddings/LayerNorm/gamma:0, shape = (1024,), *INIT_FR
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_0/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_0/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_0/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_0/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_0/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_0/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_0/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_0/output/dense/bias:0, shape = (1024,), *
INFO:tensorflow:  name = bert/encoder/layer_0/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_0/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_1/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_1/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_1/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_1/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_1/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_1/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_1/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_1/output/dense/bias:0, shape = (1024,), *
```

```
INFO:tensorflow:  name = bert/encoder/layer_1/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_1/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_2/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_2/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_2/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_2/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_2/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_2/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_2/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_2/output/dense/bias:0, shape = (1024,), *
INFO:tensorflow:  name = bert/encoder/layer_2/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_2/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_3/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_3/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_3/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_3/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_3/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_3/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_3/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_3/output/dense/bias:0, shape = (1024,), *
INFO:tensorflow:  name = bert/encoder/layer_3/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_3/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_4/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_4/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_4/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_4/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_4/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_4/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_4/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_4/output/dense/bias:0, shape = (1024,), *
INFO:tensorflow:  name = bert/encoder/layer_4/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_4/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_5/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_5/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_5/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_5/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_5/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_5/intermediate/dense/bias:0, shape = (409
```

```
INFO:tensorflow:  name = bert/encoder/layer_5/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_5/output/dense/bias:0, shape = (1024,), *
INFO:tensorflow:  name = bert/encoder/layer_5/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_5/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_6/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_6/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_6/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_6/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_6/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_6/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_6/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_6/output/dense/bias:0, shape = (1024,), *
INFO:tensorflow:  name = bert/encoder/layer_6/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_6/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_7/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_7/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_7/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_7/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_7/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_7/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_7/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_7/output/dense/bias:0, shape = (1024,), *
INFO:tensorflow:  name = bert/encoder/layer_7/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_7/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_8/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_8/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_8/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_8/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_8/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_8/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_8/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_8/output/dense/bias:0, shape = (1024,), *
INFO:tensorflow:  name = bert/encoder/layer_8/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_8/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_9/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_9/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_9/attention/output/LayerNorm/beta:0, shap
```

```
INFO:tensorflow:  name = bert/encoder/layer_9/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_9/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_9/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_9/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_9/output/dense/bias:0, shape = (1024,), *
INFO:tensorflow:  name = bert/encoder/layer_9/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_9/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_10/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_10/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_10/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_10/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_10/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_10/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_10/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_10/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_10/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_10/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_11/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_11/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_11/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_11/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_11/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_11/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_11/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_11/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_11/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_11/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_12/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_12/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_12/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_12/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_12/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_12/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_12/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_12/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_12/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_12/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_13/attention/output/dense/kernel:0, shape
```

```
INFO:tensorflow:  name = bert/encoder/layer_13/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_13/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_13/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_13/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_13/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_13/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_13/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_13/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_13/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_14/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_14/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_14/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_14/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_14/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_14/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_14/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_14/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_14/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_14/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_15/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_15/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_15/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_15/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_15/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_15/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_15/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_15/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_15/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_15/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_16/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_16/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_16/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_16/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_16/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_16/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_16/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_16/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_16/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_16/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/key/bias:0, shape = (10
```

```
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_17/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_17/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_17/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_17/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_17/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_17/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_17/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_17/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_17/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_17/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_18/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_18/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_18/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_18/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_18/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_18/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_18/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_18/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_18/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_18/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_19/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_19/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_19/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_19/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_19/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_19/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_19/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_19/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_19/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_19/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_20/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_20/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_20/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_20/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_20/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_20/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_20/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_20/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_20/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_20/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/query/bias:0, shape = (
```

```
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_21/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_21/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_21/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_21/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_21/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_21/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_21/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_21/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_21/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_21/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_22/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_22/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_22/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_22/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_22/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_22/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_22/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_22/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_22/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_22/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_23/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_23/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_23/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_23/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_23/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_23/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_23/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_23/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_23/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_23/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/pooler/dense/kernel:0, shape = (1024, 1024), *INIT_FROM
INFO:tensorflow:  name = bert/pooler/dense/bias:0, shape = (1024,), *INIT_FROM_CKPT*
INFO:tensorflow:  name = output_weights:0, shape = (2, 1024)
INFO:tensorflow:  name = output_bias:0, shape = (2,)
INFO:tensorflow:Create CheckpointSaverHook.
INFO:tensorflow:Done calling model_fn.
INFO:tensorflow:TPU job name worker
INFO:tensorflow:Graph was finalized.
INFO:tensorflow:Running local_init_op.
INFO:tensorflow:Done running local_init_op.
INFO:tensorflow:Saving checkpoints for 0 into gs://csc3002/wwm_uncased_L-24_H-1024_A-
INFO:tensorflow:Initialized dataset iterators in 2 seconds
INFO:tensorflow:Installing graceful shutdown hook.
INFO:tensorflow:Creating heartbeat manager for ['/job:worker/replica:0/task:0/device:
INFO:tensorflow:Configuring worker heartbeat: shutdown_mode: WAIT_FOR_COORDINATOR
```

```
INFO:tensorflow:Init TPU system
INFO:tensorflow:Initialized TPU in 8 seconds
INFO:tensorflow:Starting infeed thread controller.
INFO:tensorflow:Starting outfeed thread controller.
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (0, 0)
INFO:tensorflow:loss = 0.00028617607, step = 500
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (1, 0)
INFO:tensorflow:Saving checkpoints for 1000 into gs://csc3002/wwm_uncased_L-24_H-1024
INFO:tensorflow:loss = 0.00035670763, step = 1000 (137.970 sec)
INFO:tensorflow:global_step/sec: 3.62398
INFO:tensorflow:examples/sec: 28.9919
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (2, 0)
INFO:tensorflow:loss = 0.001641179, step = 1500 (44.638 sec)
INFO:tensorflow:global_step/sec: 11.2013
INFO:tensorflow:examples/sec: 89.6101
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (3, 193)
INFO:tensorflow:Saving checkpoints for 2000 into gs://csc3002/wwm_uncased_L-24_H-1024
INFO:tensorflow:loss = 0.0005623785, step = 2000 (133.699 sec)
INFO:tensorflow:global_step/sec: 3.73974
INFO:tensorflow:examples/sec: 29.9179
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (4, 0)
INFO:tensorflow:loss = 2.690803, step = 2500 (44.924 sec)
INFO:tensorflow:global_step/sec: 11.1299
INFO:tensorflow:examples/sec: 89.0392
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (5, 188)
INFO:tensorflow:Saving checkpoints for 3000 into gs://csc3002/wwm_uncased_L-24_H-1024
INFO:tensorflow:loss = 0.0003760121, step = 3000 (146.288 sec)
INFO:tensorflow:global_step/sec: 3.41791
INFO:tensorflow:examples/sec: 27.3433
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (6, 0)
INFO:tensorflow:loss = 0.00026354362, step = 3500 (44.868 sec)
INFO:tensorflow:global_step/sec: 11.144
INFO:tensorflow:examples/sec: 89.1522
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (7, 189)
INFO:tensorflow:Saving checkpoints for 4000 into gs://csc3002/wwm_uncased_L-24_H-1024
INFO:tensorflow:loss = 9.6193355e-05, step = 4000 (126.674 sec)
INFO:tensorflow:global_step/sec: 3.94712
INFO:tensorflow:examples/sec: 31.5769
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (8, 0)
INFO:tensorflow:loss = 6.521142e-05, step = 4500 (44.983 sec)
INFO:tensorflow:global_step/sec: 11.1153
INFO:tensorflow:examples/sec: 88.9228
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (9, 189)
INFO:tensorflow:Saving checkpoints for 5000 into gs://csc3002/wwm_uncased_L-24_H-1024
WARNING:tensorflow:From /usr/local/lib/python3.6/dist-packages/tensorflow_core/python
Instructions for updating:
Use standard file APIs to delete files with this prefix.
INFO:tensorflow:loss = 3.4928642e-05, step = 5000 (127.156 sec)
INFO:tensorflow:global_step/sec: 3.93218
INFO:tensorflow:examples/sec: 31.4574
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (10, 0)
INFO:tensorflow:loss = 0.00060394814, step = 5500 (45.069 sec)
INFO:tensorflow:global_step/sec: 11.0942
INFO:tensorflow:examples/sec: 88.7533
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (11, 188)
INFO:tensorflow:Saving checkpoints for 6000 into gs://csc3002/wwm_uncased_L-24_H-1024
INFO:tensorflow:loss = 0.00012206455, step = 6000 (132.147 sec)
INFO:tensorflow:global_step/sec: 3.78366
INFO:tensorflow:examples/sec: 30.2693
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (12, 0)
INFO:tensorflow:loss = 0.00010477721, step = 6500 (44.802 sec)
INFO:tensorflow:global_step/sec: 11.1602
INFO:tensorflow:examples/sec: 89.2819
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (13, 189)
INFO:tensorflow:Saving checkpoints for 7000 into gs://csc3002/wwm_uncased_L-24_H-1024
INFO:tensorflow:loss = 0.00019033632, step = 7000 (137.586 sec)
INFO:tensorflow:global_step/sec: 3.6341
INFO:tensorflow:examples/sec: 29.0728
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (14, 0)
INFO:tensorflow:loss = 7.4741765e-05, step = 7500 (45.004 sec)
INFO:tensorflow:global_step/sec: 11.11
INFO:tensorflow:examples/sec: 88.8802
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (15, 189)
INFO:tensorflow:Saving checkpoints for 8000 into gs://csc3002/wwm_uncased_L-24_H-1024
INFO:tensorflow:loss = 0.000901879, step = 8000 (127.326 sec)
INFO:tensorflow:global_step/sec: 3.92692
INFO:tensorflow:examples/sec: 31.4154
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (16, 0)
INFO:tensorflow:loss = 5.960584e-05, step = 8500 (44.972 sec)
INFO:tensorflow:global_step/sec: 11.118
INFO:tensorflow:examples/sec: 88.9443
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (17, 188)
INFO:tensorflow:Saving checkpoints for 9000 into gs://csc3002/wwm_uncased_L-24_H-1024
INFO:tensorflow:loss = 4.1362917e-05, step = 9000 (124.620 sec)
INFO:tensorflow:global_step/sec: 4.01219
INFO:tensorflow:examples/sec: 32.0975
```

```
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (18, 0)
INFO:tensorflow:loss = 6.652171e-05, step = 9500 (44.885 sec)
INFO:tensorflow:global_step/sec: 11.1397
INFO:tensorflow:examples/sec: 89.1176
INFO:tensorflow:Enqueue next (88) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (88) batch(es) of data from outfeed.
INFO:tensorflow:loss = 5.0422455e-05, step = 9588 (11.417 sec)
INFO:tensorflow:global_step/sec: 7.70715
INFO:tensorflow:examples/sec: 61.6572
INFO:tensorflow:Saving checkpoints for 9588 into gs://csc3002/wwm_uncased_L-24_H-1024
INFO:tensorflow:Stop infeed thread controller
INFO:tensorflow:Shutting down InfeedController thread.
INFO:tensorflow:InfeedController received shutdown signal, stopping.
INFO:tensorflow:Infeed thread finished, shutting down.
INFO:tensorflow:infeed marked as finished
INFO:tensorflow:Stop output thread controller
INFO:tensorflow:Shutting down OutfeedController thread.
INFO:tensorflow:OutfeedController received shutdown signal, stopping.
INFO:tensorflow:Outfeed thread finished, shutting down.
INFO:tensorflow:outfeed marked as finished
INFO:tensorflow:Shutdown TPU system.
INFO:tensorflow:Loss for final step: 5.0422455e-05.
INFO:tensorflow:training_loop marked as finished
Training took time  0:33:47.474280
```

Lets see if we can load our fine-tuned model from the bucket and use it to classify our test data

Lets attempt to restore our model for prediction from a previ checkpoint

You can start from this point if you do not wish to fine-tune BERT from scratch and you already h checkpoint. Likewise you can add extra data on to your training and see if it improves performan

```
bert_ckpt_file = tf.train.latest_checkpoint(bert_ckpt_dir)

model_fn = run_classifier.model_fn_builder(
    bert_config= run_classifier.modeling.BertConfig.from_json_file(bert_config_file),
    num_labels=len(label_list),
    init_checkpoint=bert_ckpt_file,
    learning_rate=LEARNING_RATE,
    num_train_steps=num_train_steps,
    num_warmup_steps=num_warmup_steps,
    use_tpu=True,
    use_one_hot_embeddings=True)
```

Now let's use our test data to see how well our model did:

```
test_input_fn = run_classifier.input_fn_builder(
    features=test_features,
    seq_length=MAX_SEQ_LENGTH,
    is_training=False,
    drop_remainder=True)

#You need to provide number of steps for a TPU
eval_steps = int(len(test_InputExamples) / EVAL_BATCH_SIZE)

# Eval will be slightly WRONG on the TPU because it will truncate the last batch.
estimator.evaluate(input_fn=test_input_fn, steps=eval_steps)
```

```
INFO:tensorflow:Calling model_fn.
INFO:tensorflow:*** Features ***
INFO:tensorflow:  name = input_ids, shape = (1, 256)
INFO:tensorflow:  name = input_mask, shape = (1, 256)
INFO:tensorflow:  name = label_ids, shape = (1,)
INFO:tensorflow:  name = segment_ids, shape = (1, 256)
INFO:tensorflow:**** Trainable Variables ****
INFO:tensorflow:  name = bert/embeddings/word_embeddings:0, shape = (30522, 1024), *I
INFO:tensorflow:  name = bert/embeddings/token_type_embeddings:0, shape = (2, 1024),
INFO:tensorflow:  name = bert/embeddings/position_embeddings:0, shape = (512, 1024),
INFO:tensorflow:  name = bert/embeddings/LayerNorm/beta:0, shape = (1024,), *INIT_FRO
INFO:tensorflow:  name = bert/embeddings/LayerNorm/gamma:0, shape = (1024,), *INIT_FR
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_0/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_0/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_0/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_0/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_0/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_0/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_0/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_0/output/dense/bias:0, shape = (1024,), *
INFO:tensorflow:  name = bert/encoder/layer_0/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_0/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_1/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_1/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_1/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_1/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_1/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_1/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_1/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_1/output/dense/bias:0, shape = (1024,), *
INFO:tensorflow:  name = bert/encoder/layer_1/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_1/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_2/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_2/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_2/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_2/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_2/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_2/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_2/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_2/output/dense/bias:0, shape = (1024,), *
INFO:tensorflow:  name = bert/encoder/layer_2/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_2/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/query/kernel:0, shape =
```

```
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_3/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_3/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_3/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_3/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_3/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_3/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_3/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_3/output/dense/bias:0, shape = (1024,), *
INFO:tensorflow:  name = bert/encoder/layer_3/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_3/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_4/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_4/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_4/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_4/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_4/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_4/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_4/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_4/output/dense/bias:0, shape = (1024,), *
INFO:tensorflow:  name = bert/encoder/layer_4/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_4/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_5/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_5/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_5/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_5/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_5/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_5/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_5/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_5/output/dense/bias:0, shape = (1024,), *
INFO:tensorflow:  name = bert/encoder/layer_5/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_5/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_6/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_6/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_6/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_6/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_6/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_6/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_6/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_6/output/dense/bias:0, shape = (1024,), *
INFO:tensorflow:  name = bert/encoder/layer_6/output/LayerNorm/beta:0, shape = (1024,
```

```
INFO:tensorflow:  name = bert/encoder/layer_6/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_7/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_7/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_7/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_7/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_7/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_7/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_7/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_7/output/dense/bias:0, shape = (1024,), *
INFO:tensorflow:  name = bert/encoder/layer_7/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_7/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_8/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_8/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_8/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_8/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_8/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_8/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_8/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_8/output/dense/bias:0, shape = (1024,), *
INFO:tensorflow:  name = bert/encoder/layer_8/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_8/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_9/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_9/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_9/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_9/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_9/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_9/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_9/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_9/output/dense/bias:0, shape = (1024,), *
INFO:tensorflow:  name = bert/encoder/layer_9/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_9/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_10/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_10/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_10/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_10/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_10/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_10/intermediate/dense/bias:0, shape = (40
```

```
INFO:tensorflow:  name = bert/encoder/layer_10/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_10/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_10/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_10/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_11/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_11/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_11/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_11/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_11/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_11/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_11/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_11/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_11/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_11/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_12/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_12/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_12/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_12/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_12/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_12/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_12/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_12/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_12/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_12/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_13/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_13/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_13/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_13/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_13/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_13/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_13/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_13/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_13/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_13/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_14/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_14/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_14/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_14/attention/output/LayerNorm/gamma:0, sh
```

```
INFO:tensorflow:  name = bert/encoder/layer_14/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_14/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_14/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_14/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_14/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_14/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_15/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_15/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_15/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_15/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_15/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_15/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_15/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_15/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_15/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_15/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_16/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_16/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_16/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_16/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_16/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_16/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_16/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_16/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_16/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_16/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_17/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_17/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_17/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_17/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_17/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_17/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_17/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_17/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_17/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_17/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_18/attention/output/dense/kernel:0, shape
```

```
INFO:tensorflow:  name = bert/encoder/layer_18/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_18/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_18/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_18/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_18/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_18/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_18/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_18/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_18/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_19/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_19/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_19/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_19/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_19/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_19/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_19/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_19/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_19/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_19/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_20/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_20/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_20/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_20/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_20/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_20/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_20/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_20/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_20/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_20/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_21/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_21/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_21/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_21/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_21/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_21/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_21/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_21/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_21/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_21/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/value/kernel:0, shape =
```

```
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_22/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_22/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_22/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_22/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_22/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_22/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_22/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_22/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_22/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_22/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_23/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_23/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_23/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_23/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_23/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_23/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_23/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_23/output/dense/bias:0, shape = (1024,),
INFO:tensorflow:  name = bert/encoder/layer_23/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_23/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/pooler/dense/kernel:0, shape = (1024, 1024), *INIT_FROM
INFO:tensorflow:  name = bert/pooler/dense/bias:0, shape = (1024,), *INIT_FROM_CKPT*
INFO:tensorflow:  name = output_weights:0, shape = (2, 1024)
INFO:tensorflow:  name = output_bias:0, shape = (2,)
INFO:tensorflow:Done calling model_fn.
INFO:tensorflow:Starting evaluation at 2019-12-12T16:10:02Z
INFO:tensorflow:TPU job name worker
INFO:tensorflow:Graph was finalized.
INFO:tensorflow:Restoring parameters from gs://csc3002/wwm_uncased_L-24_H-1024_A-16/o
INFO:tensorflow:Running local_init_op.
INFO:tensorflow:Done running local_init_op.
INFO:tensorflow:Init TPU system
INFO:tensorflow:Initialized TPU in 8 seconds
INFO:tensorflow:Starting infeed thread controller.
INFO:tensorflow:Starting outfeed thread controller.
INFO:tensorflow:Initialized dataset iterators in 0 seconds
INFO:tensorflow:Enqueue next (799) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (799) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (0, 0)
INFO:tensorflow:Evaluation [799/799]
INFO:tensorflow:Stop infeed thread controller
INFO:tensorflow:Shutting down InfeedController thread.
INFO:tensorflow:InfeedController received shutdown signal, stopping.
INFO:tensorflow:Infeed thread finished, shutting down.
INFO:tensorflow:infeed marked as finished
INFO:tensorflow:Stop output thread controller
INFO:tensorflow:Shutting down OutfeedController thread.
INFO:tensorflow:OutfeedController received shutdown signal, stopping.
INFO:tensorflow:Outfeed thread finished, shutting down.
INFO:tensorflow:outfeed marked as finished
INFO:tensorflow:Shutdown TPU system.
INFO:tensorflow:Finished evaluation at 2019-12-12-16:12:04
INFO:tensorflow:Saving dict for global step 9588: eval_accuracy = 0.96886736, eval_lo
INFO:tensorflow:Saving 'checkpoint_path' summary for global step 9588: gs://csc3002/w
```

```
INFO:tensorflow:evaluation_loop marked as finished
{'eval_accuracy': 0.96886736,
 'eval_loss': 0.24900922,
 'global_step': 9588,
 'loss': 0.31484494}
```

Now let's write code to make predictions on new sentences:

Let's train our model with the full set

Run separately from training above if you can to maximise performance

```
all_features = train_features + test_features

num_train_steps = int(len(all_features) / TRAIN_BATCH_SIZE * NUM_TRAIN_EPOCHS)
num_warmup_steps = int(num_train_steps * WARMUP_PROPORTION)

model_fn = run_classifier.model_fn_builder(
    bert_config= run_classifier.modeling.BertConfig.from_json_file(bert_config_file),
    num_labels=len(label_list),
    init_checkpoint=bert_ckpt_file,
    learning_rate=LEARNING_RATE,
    num_train_steps=num_train_steps,
    num_warmup_steps=num_warmup_steps,
    use_tpu=True,
    use_one_hot_embeddings=True)

estimator = tf.contrib.tpu.TPUEstimator(
    use_tpu=True,
    model_fn=model_fn,
    config=run_config,
    train_batch_size=TRAIN_BATCH_SIZE,
    eval_batch_size=EVAL_BATCH_SIZE,
    predict_batch_size=PREDICT_BATCH_SIZE)

# Create an input function for training. drop_remainder = True for using TPUs.
train_input_fn = bert.run_classifier.input_fn_builder(
    features=test_features,
    seq_length=MAX_SEQ_LENGTH,
    is_training=True,
    drop_remainder=True)


print("The model will stop training when it reaches", num_train_steps, "as a checkpoint\n"
print(f'Beginning Training!')
current_time = datetime.now()
estimator.train(input_fn=train_input_fn, max_steps=num_train_steps)
print("Training took time ", datetime.now() - current_time)
```

```
WARNING:tensorflow:Estimator's model_fn (<function model_fn_builder.<locals>.model_fn
INFO:tensorflow:Using config: {'_model_dir': 'gs://csc3002/wwm_uncased_L-24_H-1024_A-
cluster_def {
  job {
    name: "worker"
    tasks {
      key: 0
      value: "10.68.2.10:8470"
    }
  }
}
isolate_session_state: true
, '_keep_checkpoint_max': 5, '_keep_checkpoint_every_n_hours': 10000, '_log_step_coun
INFO:tensorflow:_TPUContext: eval_on_tpu True
The model will stop training when it reaches 11985 as a checkpoint

Beginning Training!
INFO:tensorflow:Querying Tensorflow master (grpc://10.68.2.10:8470) for TPU system me
INFO:tensorflow:Found TPU system:
INFO:tensorflow:*** Num TPU Cores: 8
INFO:tensorflow:*** Num TPU Workers: 1
INFO:tensorflow:*** Num TPU Cores Per Worker: 8
INFO:tensorflow:*** Available Device: _DeviceAttributes(/job:worker/replica:0/task:0/
INFO:tensorflow:*** Available Device: _DeviceAttributes(/job:worker/replica:0/task:0/
INFO:tensorflow:*** Available Device: _DeviceAttributes(/job:worker/replica:0/task:0/
INFO:tensorflow:*** Available Device: _DeviceAttributes(/job:worker/replica:0/task:0/
INFO:tensorflow:*** Available Device: _DeviceAttributes(/job:worker/replica:0/task:0/
INFO:tensorflow:*** Available Device: _DeviceAttributes(/job:worker/replica:0/task:0/
INFO:tensorflow:*** Available Device: _DeviceAttributes(/job:worker/replica:0/task:0/
INFO:tensorflow:*** Available Device: _DeviceAttributes(/job:worker/replica:0/task:0/
INFO:tensorflow:*** Available Device: _DeviceAttributes(/job:worker/replica:0/task:0/
INFO:tensorflow:*** Available Device: _DeviceAttributes(/job:worker/replica:0/task:0/
INFO:tensorflow:*** Available Device: _DeviceAttributes(/job:worker/replica:0/task:0/
INFO:tensorflow:Calling model_fn.
INFO:tensorflow:*** Features ***
INFO:tensorflow:  name = input_ids, shape = (1, 256)
INFO:tensorflow:  name = input_mask, shape = (1, 256)
INFO:tensorflow:  name = label_ids, shape = (1,)
INFO:tensorflow:  name = segment_ids, shape = (1, 256)
INFO:tensorflow:**** Trainable Variables ****
INFO:tensorflow:  name = bert/embeddings/word_embeddings:0, shape = (30522, 1024)
INFO:tensorflow:  name = bert/embeddings/token_type_embeddings:0, shape = (2, 1024)
INFO:tensorflow:  name = bert/embeddings/position_embeddings:0, shape = (512, 1024)
INFO:tensorflow:  name = bert/embeddings/LayerNorm/beta:0, shape = (1024,)
INFO:tensorflow:  name = bert/embeddings/LayerNorm/gamma:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_0/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_0/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_0/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_0/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_0/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_0/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_0/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_0/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_0/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_0/output/LayerNorm/gamma:0, shape = (1024
```

```
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_1/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_1/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_1/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_1/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_1/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_1/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_1/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_1/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_1/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_1/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_2/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_2/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_2/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_2/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_2/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_2/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_2/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_2/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_2/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_2/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_3/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_3/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_3/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_3/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_3/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_3/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_3/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_3/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_3/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_3/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_4/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_4/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_4/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_4/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_4/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_4/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_4/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_4/output/dense/bias:0, shape = (1024,)
```

```
INFO:tensorflow:  name = bert/encoder/layer_4/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_4/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_5/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_5/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_5/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_5/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_5/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_5/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_5/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_5/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_5/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_5/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_6/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_6/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_6/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_6/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_6/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_6/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_6/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_6/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_6/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_6/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_7/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_7/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_7/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_7/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_7/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_7/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_7/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_7/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_7/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_7/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_8/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_8/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_8/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_8/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_8/intermediate/dense/kernel:0, shape = (1
```

```
INFO:tensorflow:  name = bert/encoder/layer_8/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_8/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_8/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_8/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_8/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_9/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_9/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_9/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_9/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_9/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_9/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_9/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_9/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_9/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_9/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_10/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_10/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_10/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_10/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_10/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_10/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_10/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_10/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_10/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_10/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_11/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_11/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_11/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_11/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_11/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_11/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_11/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_11/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_11/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_11/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_12/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_12/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_12/attention/output/LayerNorm/beta:0, sha
```

```
INFO:tensorflow:  name = bert/encoder/layer_12/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_12/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_12/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_12/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_12/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_12/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_12/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_13/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_13/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_13/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_13/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_13/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_13/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_13/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_13/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_13/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_13/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_14/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_14/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_14/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_14/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_14/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_14/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_14/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_14/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_14/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_14/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_15/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_15/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_15/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_15/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_15/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_15/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_15/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_15/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_15/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_15/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/value/bias:0, shape = (
```

```
INFO:tensorflow:  name = bert/encoder/layer_16/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_16/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_16/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_16/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_16/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_16/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_16/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_16/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_16/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_16/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_17/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_17/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_17/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_17/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_17/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_17/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_17/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_17/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_17/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_17/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_18/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_18/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_18/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_18/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_18/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_18/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_18/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_18/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_18/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_18/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_19/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_19/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_19/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_19/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_19/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_19/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_19/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_19/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_19/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_19/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/key/bias:0, shape = (10
```

```
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_20/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_20/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_20/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_20/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_20/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_20/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_20/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_20/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_20/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_20/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_21/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_21/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_21/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_21/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_21/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_21/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_21/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_21/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_21/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_21/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_22/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_22/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_22/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_22/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_22/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_22/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_22/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_22/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_22/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_22/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_23/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_23/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_23/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_23/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_23/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_23/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_23/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_23/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_23/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_23/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/pooler/dense/kernel:0, shape = (1024, 1024)
```

```
INFO:tensorflow:  name = bert/pooler/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = output_weights:0, shape = (2, 1024)
INFO:tensorflow:  name = output_bias:0, shape = (2,)
INFO:tensorflow:Create CheckpointSaverHook.
INFO:tensorflow:Done calling model_fn.
INFO:tensorflow:TPU job name worker
INFO:tensorflow:Graph was finalized.
INFO:tensorflow:Restoring parameters from gs://csc3002/wwm_uncased_L-24_H-1024_A-16/o
WARNING:tensorflow:From /usr/local/lib/python3.6/dist-packages/tensorflow_core/python
Instructions for updating:
Use standard file utilities to get mtimes.
INFO:tensorflow:Running local_init_op.
INFO:tensorflow:Done running local_init_op.
INFO:tensorflow:Saving checkpoints for 9588 into gs://csc3002/wwm_uncased_L-24_H-1024
INFO:tensorflow:Initialized dataset iterators in 1 seconds
INFO:tensorflow:Installing graceful shutdown hook.
INFO:tensorflow:Creating heartbeat manager for ['/job:worker/replica:0/task:0/device:
INFO:tensorflow:Configuring worker heartbeat: shutdown_mode: WAIT_FOR_COORDINATOR

INFO:tensorflow:Init TPU system
INFO:tensorflow:Initialized TPU in 8 seconds
INFO:tensorflow:Starting infeed thread controller.
INFO:tensorflow:Starting outfeed thread controller.
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (0, 0)
INFO:tensorflow:loss = 4.5057703e-05, step = 10088
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (1, 0)
INFO:tensorflow:Saving checkpoints for 10588 into gs://csc3002/wwm_uncased_L-24_H-102
INFO:tensorflow:loss = 3.0041514e-05, step = 10588 (148.294 sec)
INFO:tensorflow:global_step/sec: 3.37168
INFO:tensorflow:examples/sec: 26.9734
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (2, 0)
INFO:tensorflow:loss = 0.00019450819, step = 11088 (44.858 sec)
INFO:tensorflow:global_step/sec: 11.1464
INFO:tensorflow:examples/sec: 89.171
INFO:tensorflow:Enqueue next (500) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (500) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (3, 191)
INFO:tensorflow:Saving checkpoints for 11588 into gs://csc3002/wwm_uncased_L-24_H-102
INFO:tensorflow:loss = 3.385649e-05, step = 11588 (130.267 sec)
INFO:tensorflow:global_step/sec: 3.83826
INFO:tensorflow:examples/sec: 30.7061
INFO:tensorflow:Enqueue next (397) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (397) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (4, 0)
INFO:tensorflow:loss = 2.980292e-05, step = 11985 (36.554 sec)
INFO:tensorflow:global_step/sec: 10.8606
INFO:tensorflow:examples/sec: 86.885
INFO:tensorflow:Saving checkpoints for 11985 into gs://csc3002/wwm_uncased_L-24_H-102
INFO:tensorflow:Stop infeed thread controller
INFO:tensorflow:Shutting down InfeedController thread.
INFO:tensorflow:InfeedController received shutdown signal, stopping.
INFO:tensorflow:Infeed thread finished, shutting down.
INFO:tensorflow:infeed marked as finished
INFO:tensorflow:Stop output thread controller
INFO:tensorflow:Shutting down OutfeedController thread.
INFO:tensorflow:OutfeedController received shutdown signal, stopping.
```

```
INFO:tensorflow:Outfeed thread finished, shutting down.
INFO:tensorflow:outfeed marked as finished
INFO:tensorflow:Shutdown TPU system.
INFO:tensorflow:Loss for final step: 2.980292e-05.
INFO:tensorflow:training_loop marked as finished
Training took time  0:12:28.106426
```

```
def getPrediction(in_sentences):

  labels = [0, 1]
  input_examples = [run_classifier.InputExample(guid="", text_a = x, text_b = None, label
  input_features = run_classifier.convert_examples_to_features(input_examples, label_list,
  predict_input_fn = run_classifier.input_fn_builder(features=input_features, seq_length=M
  predictions = list(estimator.predict(predict_input_fn))

  #Initialise empty predicted labels array
  predicted_classes = [None] * len(predictions)

  #Use a for loop to iterate through probabilities and for each prediction assign a label
  #corresponding to which label has the highest probability
  for i in range(0, len(predictions)):
    if predictions[i]['probabilities'][0] > predictions[i]['probabilities'][1]:
      predicted_classes[i] = 0
    else:
      predicted_classes[i] = 1
  return predicted_classes
```

Loading in our unlabelled test data:

```
#For analyticsvidhya
testing = '/content/drive/My Drive/trial/test_tweets_anuFYb8.csv'
testing = pd.read_csv(testing, sep=',',  index_col = False)

"""#For hatEval
testing = '/content/drive/My Drive/hateval2019/hateval2019_en_test.csv'
testing = pd.read_csv(testing, sep=',',  index_col = False)
testing.rename(columns={'text': 'tweet', 'HS': 'label'}, inplace=True)"""

testing.head()
```

	id	tweet
0	31963	#studiolife #aislife #requires #passion #dedic...
1	31964	@user #white #supremacists want everyone to s...
2	31965	safe ways to heal your #acne!! #altwaystohe...
3	31966	is the hp and the cursed child book up for res...
4	31967	3rd #bihday to my amazing, hilarious #nephew...

Preprocess the testing data just like the training data

```
testing['tweet'] = testing['tweet'].apply(preprocess)
```

```
predictions = getPrediction(testing.tweet)
```

```
INFO:tensorflow:Writing example 0 of 17197
INFO:tensorflow:*** Example ***
INFO:tensorflow:guid:
INFO:tensorflow:tokens: [CLS] # studio ##life # ai ##sl ##ife # requires # passion #
INFO:tensorflow:input_ids: 101 1001 2996 15509 1001 9932 14540 29323 1001 5942 1001 6
INFO:tensorflow:input_mask: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 0
INFO:tensorflow:segment_ids: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
INFO:tensorflow:label: 0 (id = 0)
INFO:tensorflow:*** Example ***
INFO:tensorflow:guid:
INFO:tensorflow:tokens: [CLS] # white # su ##pre ##mac ##ists want everyone to see th
INFO:tensorflow:input_ids: 101 1001 2317 1001 10514 28139 22911 5130 2215 3071 2000 2
INFO:tensorflow:input_mask: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 0
INFO:tensorflow:segment_ids: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
INFO:tensorflow:label: 0 (id = 0)
INFO:tensorflow:*** Example ***
INFO:tensorflow:guid:
INFO:tensorflow:tokens: [CLS] safe ways to heal your # ac ##ne ! ! # alt ##ways ##to
INFO:tensorflow:input_ids: 101 3647 3971 2000 11005 2115 1001 9353 2638 999 999 1001
INFO:tensorflow:input_mask: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 0 0 0
INFO:tensorflow:segment_ids: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
INFO:tensorflow:label: 0 (id = 0)
INFO:tensorflow:*** Example ***
INFO:tensorflow:guid:
INFO:tensorflow:tokens: [CLS] is the hp and the cursed child book up for reservations
INFO:tensorflow:input_ids: 101 2003 1996 6522 1998 1996 10678 2775 2338 2039 2005 178
INFO:tensorflow:input_mask: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
INFO:tensorflow:segment_ids: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
INFO:tensorflow:label: 0 (id = 0)
INFO:tensorflow:*** Example ***
INFO:tensorflow:guid:
INFO:tensorflow:tokens: [CLS] 3rd # bi ##hd ##ay to my amazing , hilarious # nephew e
INFO:tensorflow:input_ids: 101 3822 1001 12170 14945 4710 2000 2026 6429 1010 26316 1
INFO:tensorflow:input_mask: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 0
INFO:tensorflow:segment_ids: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
INFO:tensorflow:label: 0 (id = 0)
INFO:tensorflow:Writing example 10000 of 17197
INFO:tensorflow:Calling model_fn.
INFO:tensorflow:*** Features ***
INFO:tensorflow:  name = input_ids, shape = (1, 256)
INFO:tensorflow:  name = input_mask, shape = (1, 256)
INFO:tensorflow:  name = label_ids, shape = (1,)
INFO:tensorflow:  name = segment_ids, shape = (1, 256)
INFO:tensorflow:**** Trainable Variables ****
INFO:tensorflow:  name = bert/embeddings/word_embeddings:0, shape = (30522, 1024)
INFO:tensorflow:  name = bert/embeddings/token_type_embeddings:0, shape = (2, 1024)
INFO:tensorflow:  name = bert/embeddings/position_embeddings:0, shape = (512, 1024)
INFO:tensorflow:  name = bert/embeddings/LayerNorm/beta:0, shape = (1024,)
INFO:tensorflow:  name = bert/embeddings/LayerNorm/gamma:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_0/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_0/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_0/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_0/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_0/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_0/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_0/intermediate/dense/bias:0, shape = (409
```

```
INFO:tensorflow:  name = bert/encoder/layer_0/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_0/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_0/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_0/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_1/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_1/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_1/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_1/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_1/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_1/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_1/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_1/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_1/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_1/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_1/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_2/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_2/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_2/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_2/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_2/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_2/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_2/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_2/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_2/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_2/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_2/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_3/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_3/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_3/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_3/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_3/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_3/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_3/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_3/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_3/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_3/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_3/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_4/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_4/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_4/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_4/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_4/attention/output/LayerNorm/gamma:0, sha
```

```
INFO:tensorflow:  name = bert/encoder/layer_4/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_4/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_4/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_4/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_4/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_4/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_4/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_5/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_5/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_5/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_5/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_5/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_5/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_5/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_5/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_5/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_5/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_5/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_6/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_6/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_6/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_6/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_6/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_6/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_6/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_6/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_6/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_6/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_6/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_7/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_7/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_7/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_7/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_7/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_7/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_7/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_7/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_7/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_7/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_7/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_8/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_8/attention/output/dense/kernel:0, shape
```

```
INFO:tensorflow:  name = bert/encoder/layer_8/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_8/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_8/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_8/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_8/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_8/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_8/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_8/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_8/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/query/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/key/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/key/bias:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_9/attention/self/value/bias:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_9/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_9/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_9/attention/output/LayerNorm/beta:0, shap
INFO:tensorflow:  name = bert/encoder/layer_9/attention/output/LayerNorm/gamma:0, sha
INFO:tensorflow:  name = bert/encoder/layer_9/intermediate/dense/kernel:0, shape = (1
INFO:tensorflow:  name = bert/encoder/layer_9/intermediate/dense/bias:0, shape = (409
INFO:tensorflow:  name = bert/encoder/layer_9/output/dense/kernel:0, shape = (4096, 1
INFO:tensorflow:  name = bert/encoder/layer_9/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_9/output/LayerNorm/beta:0, shape = (1024,
INFO:tensorflow:  name = bert/encoder/layer_9/output/LayerNorm/gamma:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_10/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_10/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_10/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_10/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_10/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_10/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_10/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_10/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_10/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_10/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_10/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_11/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_11/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_11/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_11/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_11/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_11/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_11/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_11/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_11/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_11/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_11/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/value/kernel:0, shape =
```

```
INFO:tensorflow:  name = bert/encoder/layer_12/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_12/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_12/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_12/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_12/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_12/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_12/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_12/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_12/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_12/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_12/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_13/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_13/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_13/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_13/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_13/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_13/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_13/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_13/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_13/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_13/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_13/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_14/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_14/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_14/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_14/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_14/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_14/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_14/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_14/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_14/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_14/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_14/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_15/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_15/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_15/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_15/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_15/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_15/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_15/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_15/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_15/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_15/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_15/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/query/bias:0, shape = (
```

```
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_16/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_16/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_16/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_16/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_16/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_16/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_16/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_16/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_16/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_16/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_16/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_17/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_17/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_17/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_17/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_17/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_17/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_17/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_17/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_17/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_17/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_17/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_18/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_18/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_18/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_18/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_18/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_18/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_18/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_18/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_18/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_18/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_18/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_19/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_19/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_19/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_19/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_19/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_19/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_19/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_19/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_19/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_19/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_19/output/LayerNorm/gamma:0, shape = (102
```

```
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_20/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_20/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_20/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_20/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_20/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_20/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_20/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_20/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_20/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_20/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_20/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_21/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_21/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_21/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_21/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_21/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_21/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_21/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_21/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_21/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_21/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_21/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_22/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_22/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_22/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_22/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_22/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_22/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_22/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_22/output/dense/kernel:0, shape = (4096,
INFO:tensorflow:  name = bert/encoder/layer_22/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_22/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_22/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/query/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/query/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/key/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/key/bias:0, shape = (10
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/value/kernel:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_23/attention/self/value/bias:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_23/attention/output/dense/kernel:0, shape
INFO:tensorflow:  name = bert/encoder/layer_23/attention/output/dense/bias:0, shape =
INFO:tensorflow:  name = bert/encoder/layer_23/attention/output/LayerNorm/beta:0, sha
INFO:tensorflow:  name = bert/encoder/layer_23/attention/output/LayerNorm/gamma:0, sh
INFO:tensorflow:  name = bert/encoder/layer_23/intermediate/dense/kernel:0, shape = (
INFO:tensorflow:  name = bert/encoder/layer_23/intermediate/dense/bias:0, shape = (40
INFO:tensorflow:  name = bert/encoder/layer_23/output/dense/kernel:0, shape = (4096,
```

```
INFO:tensorflow:  name = bert/encoder/layer_23/output/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = bert/encoder/layer_23/output/LayerNorm/beta:0, shape = (1024
INFO:tensorflow:  name = bert/encoder/layer_23/output/LayerNorm/gamma:0, shape = (102
INFO:tensorflow:  name = bert/pooler/dense/kernel:0, shape = (1024, 1024)
INFO:tensorflow:  name = bert/pooler/dense/bias:0, shape = (1024,)
INFO:tensorflow:  name = output_weights:0, shape = (2, 1024)
INFO:tensorflow:  name = output_bias:0, shape = (2,)
INFO:tensorflow:Done calling model_fn.
INFO:tensorflow:TPU job name worker
INFO:tensorflow:Graph was finalized.
INFO:tensorflow:Restoring parameters from gs://csc3002/wwm_uncased_L-24_H-1024_A-16/o
INFO:tensorflow:Running local_init_op.
INFO:tensorflow:Done running local_init_op.
INFO:tensorflow:Init TPU system
INFO:tensorflow:Initialized TPU in 8 seconds
INFO:tensorflow:Starting infeed thread controller.
INFO:tensorflow:Starting outfeed thread controller.
INFO:tensorflow:Initialized dataset iterators in 1 seconds
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Outfeed finished for iteration (0, 0)
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
```

```
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
```

```
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Enqueue next (1) batch(es) of data to infeed.
INFO:tensorflow:Dequeue next (1) batch(es) of data from outfeed.
INFO:tensorflow:Stop infeed thread controller
INFO:tensorflow:Shutting down InfeedController thread.
INFO:tensorflow:InfeedController received shutdown signal, stopping.
INFO:tensorflow:Infeed thread finished, shutting down.
INFO:tensorflow:infeed marked as finished
INFO:tensorflow:Stop output thread controller
INFO:tensorflow:Shutting down OutfeedController thread.
INFO:tensorflow:OutfeedController received shutdown signal, stopping.
INFO:tensorflow:Outfeed thread finished, shutting down.
INFO:tensorflow:outfeed marked as finished
INFO:tensorflow:Shutdown TPU system.
INFO:tensorflow:prediction_loop marked as finished
INFO:tensorflow:prediction_loop marked as finished
```

```
predictions[0:20]
```

```
[0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1]
```

Placing predictions in the submissions file

```
#Renaming the tweet column to id because that's where we are putting our predictive labels
testing.rename(columns={'tweet': 'label'}, inplace=True)
testing['label'] = predictions
```

```
"""#For HatEval
correct = 0
for i in range(0, len(predictions) ):
  if testing['label'][i] == predictions[i]:
    correct = correct + 1
    else:
      correct = correct
"""
```

```
"#For HatEval\ncorrect = 0\nfor i in range(0, len(predictions) ):\n  if testing['labe
```

```
print(len(predictions))
```

```
print(len(testing.label))
testing.head()
```

```
17197
17197
```

	id	label
0	31963	0
1	31964	1
2	31965	0
3	31966	0
4	31967	0

```
testing.to_csv('/content/drive/My Drive/trial/submission.csv', sep=',', index = False)
```