

In [1]:

```
# ATTENTION: Please do not alter any of the provided code in the exercise. Only add your own code
where indicated
# ATTENTION: Please do not add or remove any cells in the exercise. The grader will check specific
cells based on the cell position.
# ATTENTION: Please use the provided epoch values when training.

# In this exercise you will train a CNN on the FULL Cats-v-dogs dataset
# This will require you doing a lot of data preprocessing because
# the dataset isn't split into training and validation for you
# This code block has all the required inputs
import os
import zipfile
import random
import shutil
import tensorflow as tf
from tensorflow.keras.optimizers import RMSprop
from tensorflow.keras.preprocessing.image import ImageDataGenerator
from shutil import copyfile
from os import getcwd
```

In [2]:

```
# This code block unzips the full Cats-v-Dogs dataset to /tmp
# which will create a tmp/PetImages directory containing subdirectories
# called 'Cat' and 'Dog' (that's how the original researchers structured it)
path_cats_and_dogs = f"{getcwd()}/../tmp2/cats-and-dogs.zip"
shutil.rmtree('/tmp')

local_zip = path_cats_and_dogs
zip_ref = zipfile.ZipFile(local_zip, 'r')
zip_ref.extractall('/tmp')
zip_ref.close()
```

In [3]:

```
print(len(os.listdir('/tmp/PetImages/Cat/')))
print(len(os.listdir('/tmp/PetImages/Dog/')))

# Expected Output:
# 1500
# 1500
```

1500  
1500

In [4]:

```
# Use os.mkdir to create your directories
# You will need a directory for cats-v-dogs, and subdirectories for training
# and testing. These in turn will need subdirectories for 'cats' and 'dogs'
# Use os.mkdir to create your directories
# You will need a directory for cats-v-dogs, and subdirectories for training
# and testing. These in turn will need subdirectories for 'cats' and 'dogs'
try:
    dir_to_create = [
        '/tmp/cats-v-dogs',
        '/tmp/cats-v-dogs/training',
        '/tmp/cats-v-dogs/testing',
        '/tmp/cats-v-dogs/training/cats',
        '/tmp/cats-v-dogs/training/dogs',
        '/tmp/cats-v-dogs/testing/cats',
        '/tmp/cats-v-dogs/testing/dogs'
    ]

    for directory in dir_to_create:
        try:
            os.mkdir(directory)
            print(directory, 'successfully created')
except:
```

```

    except:
        print(directory, 'failed to create')
except OSError:
    pass

```

```

/tmp/cats-v-dogs successfully created
/tmp/cats-v-dogs/training successfully created
/tmp/cats-v-dogs/testing successfully created
/tmp/cats-v-dogs/training/cats successfully created
/tmp/cats-v-dogs/training/dogs successfully created
/tmp/cats-v-dogs/testing/cats successfully created
/tmp/cats-v-dogs/testing/dogs successfully created

```

In [5]:

```

# Write a python function called split_data which takes
# a SOURCE directory containing the files
# a TRAINING directory that a portion of the files will be copied to
# a TESTING directory that a portion of the files will be copied to
# a SPLIT_SIZE to determine the portion
# The files should also be randomized, so that the training set is a random
# X% of the files, and the test set is the remaining files
# SO, for example, if SOURCE is PetImages/Cat, and SPLIT_SIZE is .9
# Then 90% of the images in PetImages/Cat will be copied to the TRAINING dir
# and 10% of the images will be copied to the TESTING dir
# Also -- All images should be checked, and if they have a zero file length,
# they will not be copied over
#
# os.listdir(DIRECTORY) gives you a listing of the contents of that directory
# os.path.getsize(PATH) gives you the size of the file
# copyfile(source, destination) copies a file from source to destination
# random.sample(list, len(list)) shuffles a list
def split_data(SOURCE, TRAINING, TESTING, SPLIT_SIZE):
    files = []

    for file_name in os.listdir(SOURCE):
        file_path = SOURCE + file_name

        if os.path.getsize(file_path):
            files.append(file_name)
        else:
            print('{} has zero file length, will not be copied over'.format(file_name))

    split = int(len(files) * SPLIT_SIZE)

    shuffled = random.sample(files, len(files))

    training_set = shuffled[:split]
    testing_set = shuffled[split:]

    for file_name in training_set:
        print(SOURCE + file_name, TRAINING + file_name)
        copyfile(SOURCE + file_name, TRAINING + file_name)

    for file_name in testing_set:
        copyfile(SOURCE + file_name, TESTING + file_name)

CAT_SOURCE_DIR = "/tmp/PetImages/Cat/"
TRAINING_CATS_DIR = "/tmp/cats-v-dogs/training/cats/"
TESTING_CATS_DIR = "/tmp/cats-v-dogs/testing/cats/"
DOG_SOURCE_DIR = "/tmp/PetImages/Dog/"
TRAINING_DOGS_DIR = "/tmp/cats-v-dogs/training/dogs/"
TESTING_DOGS_DIR = "/tmp/cats-v-dogs/testing/dogs/"

split_size = .9
split_data(CAT_SOURCE_DIR, TRAINING_CATS_DIR, TESTING_CATS_DIR, split_size)
split_data(DOG_SOURCE_DIR, TRAINING_DOGS_DIR, TESTING_DOGS_DIR, split_size)

```

```

/tmp/PetImages/Cat/cat.611.jpg /tmp/cats-v-dogs/training/cats/cat.611.jpg
/tmp/PetImages/Cat/cat.643.jpg /tmp/cats-v-dogs/training/cats/cat.643.jpg
/tmp/PetImages/Cat/cat.796.jpg /tmp/cats-v-dogs/training/cats/cat.796.jpg
/tmp/PetImages/Cat/cat.404.jpg /tmp/cats-v-dogs/training/cats/cat.404.jpg
/tmp/PetImages/Cat/cat.2484.jpg /tmp/cats-v-dogs/training/cats/cat.2484.jpg
/tmp/PetImages/Cat/cat.102.jpg /tmp/cats-v-dogs/training/cats/cat.102.jpg

```

[illegible]

[illegible]

/tmp/PetImages/Cat/cat.405.jpg /tmp/cats-v-dogs/training/cats/cat.405.jpg  
/tmp/PetImages/Cat/cat.178.jpg /tmp/cats-v-dogs/training/cats/cat.178.jpg  
/tmp/PetImages/Cat/cat.904.jpg /tmp/cats-v-dogs/training/cats/cat.904.jpg  
/tmp/PetImages/Cat/cat.882.jpg /tmp/cats-v-dogs/training/cats/cat.882.jpg  
/tmp/PetImages/Cat/cat.2.jpg /tmp/cats-v-dogs/training/cats/cat.2.jpg  
/tmp/PetImages/Cat/cat.173.jpg /tmp/cats-v-dogs/training/cats/cat.173.jpg  
/tmp/PetImages/Cat/cat.2417.jpg /tmp/cats-v-dogs/training/cats/cat.2417.jpg  
/tmp/PetImages/Cat/cat.720.jpg /tmp/cats-v-dogs/training/cats/cat.720.jpg  
/tmp/PetImages/Cat/cat.398.jpg /tmp/cats-v-dogs/training/cats/cat.398.jpg  
/tmp/PetImages/Cat/cat.111.jpg /tmp/cats-v-dogs/training/cats/cat.111.jpg  
/tmp/PetImages/Cat/cat.320.jpg /tmp/cats-v-dogs/training/cats/cat.320.jpg  
/tmp/PetImages/Cat/cat.334.jpg /tmp/cats-v-dogs/training/cats/cat.334.jpg  
/tmp/PetImages/Cat/cat.635.jpg /tmp/cats-v-dogs/training/cats/cat.635.jpg  
/tmp/PetImages/Cat/cat.354.jpg /tmp/cats-v-dogs/training/cats/cat.354.jpg  
/tmp/PetImages/Cat/cat.489.jpg /tmp/cats-v-dogs/training/cats/cat.489.jpg  
/tmp/PetImages/Cat/cat.48.jpg /tmp/cats-v-dogs/training/cats/cat.48.jpg  
/tmp/PetImages/Cat/cat.138.jpg /tmp/cats-v-dogs/training/cats/cat.138.jpg  
/tmp/PetImages/Cat/cat.240.jpg /tmp/cats-v-dogs/training/cats/cat.240.jpg  
/tmp/PetImages/Cat/cat.250.jpg /tmp/cats-v-dogs/training/cats/cat.250.jpg  
/tmp/PetImages/Cat/cat.997.jpg /tmp/cats-v-dogs/training/cats/cat.997.jpg  
/tmp/PetImages/Cat/cat.2206.jpg /tmp/cats-v-dogs/training/cats/cat.2206.jpg  
/tmp/PetImages/Cat/cat.2273.jpg /tmp/cats-v-dogs/training/cats/cat.2273.jpg  
/tmp/PetImages/Cat/cat.95.jpg /tmp/cats-v-dogs/training/cats/cat.95.jpg  
/tmp/PetImages/Cat/cat.787.jpg /tmp/cats-v-dogs/training/cats/cat.787.jpg  
/tmp/PetImages/Cat/cat.597.jpg /tmp/cats-v-dogs/training/cats/cat.597.jpg  
/tmp/PetImages/Cat/cat.910.jpg /tmp/cats-v-dogs/training/cats/cat.910.jpg  
/tmp/PetImages/Cat/cat.593.jpg /tmp/cats-v-dogs/training/cats/cat.593.jpg  
/tmp/PetImages/Cat/cat.921.jpg /tmp/cats-v-dogs/training/cats/cat.921.jpg  
/tmp/PetImages/Cat/cat.254.jpg /tmp/cats-v-dogs/training/cats/cat.254.jpg  
/tmp/PetImages/Cat/cat.633.jpg /tmp/cats-v-dogs/training/cats/cat.633.jpg  
/tmp/PetImages/Cat/cat.343.jpg /tmp/cats-v-dogs/training/cats/cat.343.jpg  
/tmp/PetImages/Cat/cat.2487.jpg /tmp/cats-v-dogs/training/cats/cat.2487.jpg  
/tmp/PetImages/Cat/cat.2176.jpg /tmp/cats-v-dogs/training/cats/cat.2176.jpg  
/tmp/PetImages/Cat/cat.11.jpg /tmp/cats-v-dogs/training/cats/cat.11.jpg  
/tmp/PetImages/Cat/cat.774.jpg /tmp/cats-v-dogs/training/cats/cat.774.jpg  
/tmp/PetImages/Cat/cat.54.jpg /tmp/cats-v-dogs/training/cats/cat.54.jpg  
/tmp/PetImages/Cat/cat.874.jpg /tmp/cats-v-dogs/training/cats/cat.874.jpg  
/tmp/PetImages/Cat/cat.2275.jpg /tmp/cats-v-dogs/training/cats/cat.2275.jpg  
/tmp/PetImages/Cat/cat.2060.jpg /tmp/cats-v-dogs/training/cats/cat.2060.jpg  
/tmp/PetImages/Cat/cat.76.jpg /tmp/cats-v-dogs/training/cats/cat.76.jpg  
/tmp/PetImages/Cat/cat.536.jpg /tmp/cats-v-dogs/training/cats/cat.536.jpg  
/tmp/PetImages/Cat/cat.387.jpg /tmp/cats-v-dogs/training/cats/cat.387.jpg  
/tmp/PetImages/Cat/cat.269.jpg /tmp/cats-v-dogs/training/cats/cat.269.jpg  
/tmp/PetImages/Cat/cat.2445.jpg /tmp/cats-v-dogs/training/cats/cat.2445.jpg  
/tmp/PetImages/Cat/cat.319.jpg /tmp/cats-v-dogs/training/cats/cat.319.jpg  
/tmp/PetImages/Cat/cat.818.jpg /tmp/cats-v-dogs/training/cats/cat.818.jpg  
/tmp/PetImages/Cat/cat.2458.jpg /tmp/cats-v-dogs/training/cats/cat.2458.jpg  
/tmp/PetImages/Cat/cat.2336.jpg /tmp/cats-v-dogs/training/cats/cat.2336.jpg  
/tmp/PetImages/Cat/cat.49.jpg /tmp/cats-v-dogs/training/cats/cat.49.jpg  
/tmp/PetImages/Cat/cat.289.jpg /tmp/cats-v-dogs/training/cats/cat.289.jpg  
/tmp/PetImages/Cat/cat.2069.jpg /tmp/cats-v-dogs/training/cats/cat.2069.jpg  
/tmp/PetImages/Cat/cat.495.jpg /tmp/cats-v-dogs/training/cats/cat.495.jpg  
/tmp/PetImages/Cat/cat.903.jpg /tmp/cats-v-dogs/training/cats/cat.903.jpg  
/tmp/PetImages/Cat/cat.2277.jpg /tmp/cats-v-dogs/training/cats/cat.2277.jpg  
/tmp/PetImages/Cat/cat.755.jpg /tmp/cats-v-dogs/training/cats/cat.755.jpg  
/tmp/PetImages/Cat/cat.2015.jpg /tmp/cats-v-dogs/training/cats/cat.2015.jpg  
/tmp/PetImages/Cat/cat.221.jpg /tmp/cats-v-dogs/training/cats/cat.221.jpg  
/tmp/PetImages/Cat/cat.546.jpg /tmp/cats-v-dogs/training/cats/cat.546.jpg  
/tmp/PetImages/Cat/cat.2165.jpg /tmp/cats-v-dogs/training/cats/cat.2165.jpg  
/tmp/PetImages/Cat/cat.27.jpg /tmp/cats-v-dogs/training/cats/cat.27.jpg  
/tmp/PetImages/Cat/cat.572.jpg /tmp/cats-v-dogs/training/cats/cat.572.jpg  
/tmp/PetImages/Cat/cat.2363.jpg /tmp/cats-v-dogs/training/cats/cat.2363.jpg  
/tmp/PetImages/Cat/cat.2039.jpg /tmp/cats-v-dogs/training/cats/cat.2039.jpg  
/tmp/PetImages/Cat/cat.2499.jpg /tmp/cats-v-dogs/training/cats/cat.2499.jpg  
/tmp/PetImages/Cat/cat.473.jpg /tmp/cats-v-dogs/training/cats/cat.473.jpg  
/tmp/PetImages/Cat/cat.262.jpg /tmp/cats-v-dogs/training/cats/cat.262.jpg  
/tmp/PetImages/Cat/cat.244.jpg /tmp/cats-v-dogs/training/cats/cat.244.jpg  
/tmp/PetImages/Cat/cat.952.jpg /tmp/cats-v-dogs/training/cats/cat.952.jpg  
/tmp/PetImages/Cat/cat.78.jpg /tmp/cats-v-dogs/training/cats/cat.78.jpg  
/tmp/PetImages/Cat/cat.622.jpg /tmp/cats-v-dogs/training/cats/cat.622.jpg  
/tmp/PetImages/Cat/cat.2012.jpg /tmp/cats-v-dogs/training/cats/cat.2012.jpg  
/tmp/PetImages/Cat/cat.645.jpg /tmp/cats-v-dogs/training/cats/cat.645.jpg  
/tmp/PetImages/Cat/cat.167.jpg /tmp/cats-v-dogs/training/cats/cat.167.jpg  
/tmp/PetImages/Cat/cat.510.jpg /tmp/cats-v-dogs/training/cats/cat.510.jpg  
/tmp/PetImages/Cat/cat.2365.jpg /tmp/cats-v-dogs/training/cats/cat.2365.jpg  
/tmp/PetImages/Cat/cat.540.jpg /tmp/cats-v-dogs/training/cats/cat.540.jpg  
/tmp/PetImages/Cat/cat.2289.jpg /tmp/cats-v-dogs/training/cats/cat.2289.jpg

[illegible]

[illegible]

[illegible]



[illegible]

/tmp/PetImages/Cat/cat.2056.jpg /tmp/cats-v-dogs/training/cats/cat.2056.jpg  
/tmp/PetImages/Cat/cat.2422.jpg /tmp/cats-v-dogs/training/cats/cat.2422.jpg  
/tmp/PetImages/Cat/cat.364.jpg /tmp/cats-v-dogs/training/cats/cat.364.jpg  
/tmp/PetImages/Cat/cat.215.jpg /tmp/cats-v-dogs/training/cats/cat.215.jpg  
/tmp/PetImages/Cat/cat.2310.jpg /tmp/cats-v-dogs/training/cats/cat.2310.jpg  
/tmp/PetImages/Cat/cat.184.jpg /tmp/cats-v-dogs/training/cats/cat.184.jpg  
/tmp/PetImages/Cat/cat.2402.jpg /tmp/cats-v-dogs/training/cats/cat.2402.jpg  
/tmp/PetImages/Cat/cat.768.jpg /tmp/cats-v-dogs/training/cats/cat.768.jpg  
/tmp/PetImages/Cat/cat.2376.jpg /tmp/cats-v-dogs/training/cats/cat.2376.jpg  
/tmp/PetImages/Cat/cat.222.jpg /tmp/cats-v-dogs/training/cats/cat.222.jpg  
/tmp/PetImages/Cat/cat.2260.jpg /tmp/cats-v-dogs/training/cats/cat.2260.jpg  
/tmp/PetImages/Cat/cat.2036.jpg /tmp/cats-v-dogs/training/cats/cat.2036.jpg  
/tmp/PetImages/Cat/cat.272.jpg /tmp/cats-v-dogs/training/cats/cat.272.jpg  
/tmp/PetImages/Cat/cat.114.jpg /tmp/cats-v-dogs/training/cats/cat.114.jpg  
/tmp/PetImages/Cat/cat.457.jpg /tmp/cats-v-dogs/training/cats/cat.457.jpg  
/tmp/PetImages/Cat/cat.2474.jpg /tmp/cats-v-dogs/training/cats/cat.2474.jpg  
/tmp/PetImages/Cat/cat.233.jpg /tmp/cats-v-dogs/training/cats/cat.233.jpg  
/tmp/PetImages/Cat/cat.447.jpg /tmp/cats-v-dogs/training/cats/cat.447.jpg  
/tmp/PetImages/Cat/cat.973.jpg /tmp/cats-v-dogs/training/cats/cat.973.jpg  
/tmp/PetImages/Cat/cat.411.jpg /tmp/cats-v-dogs/training/cats/cat.411.jpg  
/tmp/PetImages/Cat/cat.2323.jpg /tmp/cats-v-dogs/training/cats/cat.2323.jpg  
/tmp/PetImages/Cat/cat.2109.jpg /tmp/cats-v-dogs/training/cats/cat.2109.jpg  
/tmp/PetImages/Cat/cat.2411.jpg /tmp/cats-v-dogs/training/cats/cat.2411.jpg  
/tmp/PetImages/Cat/cat.453.jpg /tmp/cats-v-dogs/training/cats/cat.453.jpg  
/tmp/PetImages/Cat/cat.189.jpg /tmp/cats-v-dogs/training/cats/cat.189.jpg  
/tmp/PetImages/Cat/cat.853.jpg /tmp/cats-v-dogs/training/cats/cat.853.jpg  
/tmp/PetImages/Cat/cat.502.jpg /tmp/cats-v-dogs/training/cats/cat.502.jpg  
/tmp/PetImages/Cat/cat.2108.jpg /tmp/cats-v-dogs/training/cats/cat.2108.jpg  
/tmp/PetImages/Cat/cat.2368.jpg /tmp/cats-v-dogs/training/cats/cat.2368.jpg  
/tmp/PetImages/Cat/cat.448.jpg /tmp/cats-v-dogs/training/cats/cat.448.jpg  
/tmp/PetImages/Cat/cat.2271.jpg /tmp/cats-v-dogs/training/cats/cat.2271.jpg  
/tmp/PetImages/Cat/cat.374.jpg /tmp/cats-v-dogs/training/cats/cat.374.jpg  
/tmp/PetImages/Cat/cat.862.jpg /tmp/cats-v-dogs/training/cats/cat.862.jpg  
/tmp/PetImages/Cat/cat.466.jpg /tmp/cats-v-dogs/training/cats/cat.466.jpg  
/tmp/PetImages/Cat/cat.327.jpg /tmp/cats-v-dogs/training/cats/cat.327.jpg  
/tmp/PetImages/Cat/cat.2249.jpg /tmp/cats-v-dogs/training/cats/cat.2249.jpg  
/tmp/PetImages/Cat/cat.253.jpg /tmp/cats-v-dogs/training/cats/cat.253.jpg  
/tmp/PetImages/Cat/cat.177.jpg /tmp/cats-v-dogs/training/cats/cat.177.jpg  
/tmp/PetImages/Cat/cat.995.jpg /tmp/cats-v-dogs/training/cats/cat.995.jpg  
/tmp/PetImages/Cat/cat.945.jpg /tmp/cats-v-dogs/training/cats/cat.945.jpg  
/tmp/PetImages/Cat/cat.739.jpg /tmp/cats-v-dogs/training/cats/cat.739.jpg  
/tmp/PetImages/Cat/cat.461.jpg /tmp/cats-v-dogs/training/cats/cat.461.jpg  
/tmp/PetImages/Cat/cat.789.jpg /tmp/cats-v-dogs/training/cats/cat.789.jpg  
/tmp/PetImages/Cat/cat.277.jpg /tmp/cats-v-dogs/training/cats/cat.277.jpg  
/tmp/PetImages/Cat/cat.90.jpg /tmp/cats-v-dogs/training/cats/cat.90.jpg  
/tmp/PetImages/Cat/cat.2034.jpg /tmp/cats-v-dogs/training/cats/cat.2034.jpg  
/tmp/PetImages/Cat/cat.417.jpg /tmp/cats-v-dogs/training/cats/cat.417.jpg  
/tmp/PetImages/Cat/cat.506.jpg /tmp/cats-v-dogs/training/cats/cat.506.jpg  
/tmp/PetImages/Cat/cat.443.jpg /tmp/cats-v-dogs/training/cats/cat.443.jpg  
/tmp/PetImages/Cat/cat.2087.jpg /tmp/cats-v-dogs/training/cats/cat.2087.jpg  
/tmp/PetImages/Cat/cat.723.jpg /tmp/cats-v-dogs/training/cats/cat.723.jpg  
/tmp/PetImages/Cat/cat.194.jpg /tmp/cats-v-dogs/training/cats/cat.194.jpg  
/tmp/PetImages/Cat/cat.2204.jpg /tmp/cats-v-dogs/training/cats/cat.2204.jpg  
/tmp/PetImages/Cat/cat.2010.jpg /tmp/cats-v-dogs/training/cats/cat.2010.jpg  
/tmp/PetImages/Cat/cat.393.jpg /tmp/cats-v-dogs/training/cats/cat.393.jpg  
/tmp/PetImages/Cat/cat.2158.jpg /tmp/cats-v-dogs/training/cats/cat.2158.jpg  
/tmp/PetImages/Cat/cat.5.jpg /tmp/cats-v-dogs/training/cats/cat.5.jpg  
/tmp/PetImages/Cat/cat.2306.jpg /tmp/cats-v-dogs/training/cats/cat.2306.jpg  
/tmp/PetImages/Cat/cat.601.jpg /tmp/cats-v-dogs/training/cats/cat.601.jpg  
/tmp/PetImages/Cat/cat.658.jpg /tmp/cats-v-dogs/training/cats/cat.658.jpg  
/tmp/PetImages/Cat/cat.2122.jpg /tmp/cats-v-dogs/training/cats/cat.2122.jpg  
/tmp/PetImages/Cat/cat.161.jpg /tmp/cats-v-dogs/training/cats/cat.161.jpg  
/tmp/PetImages/Cat/cat.751.jpg /tmp/cats-v-dogs/training/cats/cat.751.jpg  
/tmp/PetImages/Cat/cat.139.jpg /tmp/cats-v-dogs/training/cats/cat.139.jpg  
/tmp/PetImages/Cat/cat.2194.jpg /tmp/cats-v-dogs/training/cats/cat.2194.jpg  
/tmp/PetImages/Cat/cat.824.jpg /tmp/cats-v-dogs/training/cats/cat.824.jpg  
/tmp/PetImages/Cat/cat.419.jpg /tmp/cats-v-dogs/training/cats/cat.419.jpg  
/tmp/PetImages/Cat/cat.672.jpg /tmp/cats-v-dogs/training/cats/cat.672.jpg  
/tmp/PetImages/Cat/cat.2217.jpg /tmp/cats-v-dogs/training/cats/cat.2217.jpg  
/tmp/PetImages/Cat/cat.596.jpg /tmp/cats-v-dogs/training/cats/cat.596.jpg  
/tmp/PetImages/Cat/cat.2364.jpg /tmp/cats-v-dogs/training/cats/cat.2364.jpg  
/tmp/PetImages/Cat/cat.996.jpg /tmp/cats-v-dogs/training/cats/cat.996.jpg  
/tmp/PetImages/Cat/cat.860.jpg /tmp/cats-v-dogs/training/cats/cat.860.jpg  
/tmp/PetImages/Cat/cat.310.jpg /tmp/cats-v-dogs/training/cats/cat.310.jpg  
/tmp/PetImages/Cat/cat.180.jpg /tmp/cats-v-dogs/training/cats/cat.180.jpg  
/tmp/PetImages/Cat/cat.886.jpg /tmp/cats-v-dogs/training/cats/cat.886.jpg  
/tmp/PetImages/Cat/cat.92.jpg /tmp/cats-v-dogs/training/cats/cat.92.jpg

[illegible]

[illegible]

[illegible]

/tmp/PetImages/Cat/cat.2144.jpg /tmp/cats-v-dogs/training/cats/cat.2144.jpg  
/tmp/PetImages/Cat/cat.773.jpg /tmp/cats-v-dogs/training/cats/cat.773.jpg  
/tmp/PetImages/Cat/cat.2040.jpg /tmp/cats-v-dogs/training/cats/cat.2040.jpg  
/tmp/PetImages/Cat/cat.2125.jpg /tmp/cats-v-dogs/training/cats/cat.2125.jpg  
/tmp/PetImages/Cat/cat.671.jpg /tmp/cats-v-dogs/training/cats/cat.671.jpg  
/tmp/PetImages/Cat/cat.2116.jpg /tmp/cats-v-dogs/training/cats/cat.2116.jpg  
/tmp/PetImages/Cat/cat.833.jpg /tmp/cats-v-dogs/training/cats/cat.833.jpg  
/tmp/PetImages/Cat/cat.908.jpg /tmp/cats-v-dogs/training/cats/cat.908.jpg  
/tmp/PetImages/Cat/cat.323.jpg /tmp/cats-v-dogs/training/cats/cat.323.jpg  
/tmp/PetImages/Cat/cat.2161.jpg /tmp/cats-v-dogs/training/cats/cat.2161.jpg  
/tmp/PetImages/Cat/cat.504.jpg /tmp/cats-v-dogs/training/cats/cat.504.jpg  
/tmp/PetImages/Cat/cat.2292.jpg /tmp/cats-v-dogs/training/cats/cat.2292.jpg  
/tmp/PetImages/Cat/cat.21.jpg /tmp/cats-v-dogs/training/cats/cat.21.jpg  
/tmp/PetImages/Cat/cat.2027.jpg /tmp/cats-v-dogs/training/cats/cat.2027.jpg  
/tmp/PetImages/Cat/cat.2035.jpg /tmp/cats-v-dogs/training/cats/cat.2035.jpg  
/tmp/PetImages/Cat/cat.970.jpg /tmp/cats-v-dogs/training/cats/cat.970.jpg  
/tmp/PetImages/Cat/cat.351.jpg /tmp/cats-v-dogs/training/cats/cat.351.jpg  
/tmp/PetImages/Cat/cat.155.jpg /tmp/cats-v-dogs/training/cats/cat.155.jpg  
/tmp/PetImages/Cat/cat.2471.jpg /tmp/cats-v-dogs/training/cats/cat.2471.jpg  
/tmp/PetImages/Cat/cat.963.jpg /tmp/cats-v-dogs/training/cats/cat.963.jpg  
/tmp/PetImages/Cat/cat.637.jpg /tmp/cats-v-dogs/training/cats/cat.637.jpg  
/tmp/PetImages/Cat/cat.713.jpg /tmp/cats-v-dogs/training/cats/cat.713.jpg  
/tmp/PetImages/Cat/cat.98.jpg /tmp/cats-v-dogs/training/cats/cat.98.jpg  
/tmp/PetImages/Cat/cat.23.jpg /tmp/cats-v-dogs/training/cats/cat.23.jpg  
/tmp/PetImages/Cat/cat.2408.jpg /tmp/cats-v-dogs/training/cats/cat.2408.jpg  
/tmp/PetImages/Cat/cat.157.jpg /tmp/cats-v-dogs/training/cats/cat.157.jpg  
/tmp/PetImages/Cat/cat.338.jpg /tmp/cats-v-dogs/training/cats/cat.338.jpg  
/tmp/PetImages/Cat/cat.799.jpg /tmp/cats-v-dogs/training/cats/cat.799.jpg  
/tmp/PetImages/Cat/cat.2076.jpg /tmp/cats-v-dogs/training/cats/cat.2076.jpg  
/tmp/PetImages/Cat/cat.210.jpg /tmp/cats-v-dogs/training/cats/cat.210.jpg  
/tmp/PetImages/Cat/cat.2281.jpg /tmp/cats-v-dogs/training/cats/cat.2281.jpg  
/tmp/PetImages/Cat/cat.58.jpg /tmp/cats-v-dogs/training/cats/cat.58.jpg  
/tmp/PetImages/Cat/cat.749.jpg /tmp/cats-v-dogs/training/cats/cat.749.jpg  
/tmp/PetImages/Cat/cat.337.jpg /tmp/cats-v-dogs/training/cats/cat.337.jpg  
/tmp/PetImages/Cat/cat.2118.jpg /tmp/cats-v-dogs/training/cats/cat.2118.jpg  
/tmp/PetImages/Cat/cat.335.jpg /tmp/cats-v-dogs/training/cats/cat.335.jpg  
/tmp/PetImages/Cat/cat.2071.jpg /tmp/cats-v-dogs/training/cats/cat.2071.jpg  
/tmp/PetImages/Cat/cat.321.jpg /tmp/cats-v-dogs/training/cats/cat.321.jpg  
/tmp/PetImages/Cat/cat.47.jpg /tmp/cats-v-dogs/training/cats/cat.47.jpg  
/tmp/PetImages/Cat/cat.813.jpg /tmp/cats-v-dogs/training/cats/cat.813.jpg  
/tmp/PetImages/Cat/cat.809.jpg /tmp/cats-v-dogs/training/cats/cat.809.jpg  
/tmp/PetImages/Cat/cat.901.jpg /tmp/cats-v-dogs/training/cats/cat.901.jpg  
/tmp/PetImages/Cat/cat.2319.jpg /tmp/cats-v-dogs/training/cats/cat.2319.jpg  
/tmp/PetImages/Cat/cat.685.jpg /tmp/cats-v-dogs/training/cats/cat.685.jpg  
/tmp/PetImages/Cat/cat.757.jpg /tmp/cats-v-dogs/training/cats/cat.757.jpg  
/tmp/PetImages/Cat/cat.728.jpg /tmp/cats-v-dogs/training/cats/cat.728.jpg  
/tmp/PetImages/Cat/cat.249.jpg /tmp/cats-v-dogs/training/cats/cat.249.jpg  
/tmp/PetImages/Cat/cat.263.jpg /tmp/cats-v-dogs/training/cats/cat.263.jpg  
/tmp/PetImages/Cat/cat.2023.jpg /tmp/cats-v-dogs/training/cats/cat.2023.jpg  
/tmp/PetImages/Cat/cat.2477.jpg /tmp/cats-v-dogs/training/cats/cat.2477.jpg  
/tmp/PetImages/Cat/cat.2020.jpg /tmp/cats-v-dogs/training/cats/cat.2020.jpg  
/tmp/PetImages/Cat/cat.2019.jpg /tmp/cats-v-dogs/training/cats/cat.2019.jpg  
/tmp/PetImages/Cat/cat.2221.jpg /tmp/cats-v-dogs/training/cats/cat.2221.jpg  
/tmp/PetImages/Cat/cat.401.jpg /tmp/cats-v-dogs/training/cats/cat.401.jpg  
/tmp/PetImages/Cat/cat.938.jpg /tmp/cats-v-dogs/training/cats/cat.938.jpg  
/tmp/PetImages/Cat/cat.2103.jpg /tmp/cats-v-dogs/training/cats/cat.2103.jpg  
/tmp/PetImages/Cat/cat.673.jpg /tmp/cats-v-dogs/training/cats/cat.673.jpg  
/tmp/PetImages/Cat/cat.2461.jpg /tmp/cats-v-dogs/training/cats/cat.2461.jpg  
/tmp/PetImages/Cat/cat.2170.jpg /tmp/cats-v-dogs/training/cats/cat.2170.jpg  
/tmp/PetImages/Cat/cat.668.jpg /tmp/cats-v-dogs/training/cats/cat.668.jpg  
/tmp/PetImages/Cat/cat.591.jpg /tmp/cats-v-dogs/training/cats/cat.591.jpg  
/tmp/PetImages/Cat/cat.2184.jpg /tmp/cats-v-dogs/training/cats/cat.2184.jpg  
/tmp/PetImages/Cat/cat.940.jpg /tmp/cats-v-dogs/training/cats/cat.940.jpg  
/tmp/PetImages/Cat/cat.570.jpg /tmp/cats-v-dogs/training/cats/cat.570.jpg  
/tmp/PetImages/Cat/cat.186.jpg /tmp/cats-v-dogs/training/cats/cat.186.jpg  
/tmp/PetImages/Cat/cat.2409.jpg /tmp/cats-v-dogs/training/cats/cat.2409.jpg  
/tmp/PetImages/Cat/cat.203.jpg /tmp/cats-v-dogs/training/cats/cat.203.jpg  
/tmp/PetImages/Cat/cat.352.jpg /tmp/cats-v-dogs/training/cats/cat.352.jpg  
/tmp/PetImages/Cat/cat.2330.jpg /tmp/cats-v-dogs/training/cats/cat.2330.jpg  
/tmp/PetImages/Cat/cat.2393.jpg /tmp/cats-v-dogs/training/cats/cat.2393.jpg  
/tmp/PetImages/Cat/cat.891.jpg /tmp/cats-v-dogs/training/cats/cat.891.jpg  
/tmp/PetImages/Cat/cat.363.jpg /tmp/cats-v-dogs/training/cats/cat.363.jpg  
/tmp/PetImages/Cat/cat.805.jpg /tmp/cats-v-dogs/training/cats/cat.805.jpg  
/tmp/PetImages/Cat/cat.2129.jpg /tmp/cats-v-dogs/training/cats/cat.2129.jpg  
/tmp/PetImages/Cat/cat.2320.jpg /tmp/cats-v-dogs/training/cats/cat.2320.jpg  
/tmp/PetImages/Cat/cat.237.jpg /tmp/cats-v-dogs/training/cats/cat.237.jpg  
/tmp/PetImages/Cat/cat.926.jpg /tmp/cats-v-dogs/training/cats/cat.926.jpg  
/tmp/PetImages/Cat/cat.400.jpg /tmp/cats-v-dogs/training/cats/cat.400.jpg

[illegible]

[illegible]



/tmp/PetImages/Cat/cat.cat.2419.jpg /tmp/cats-v-dogs/training/cats/cat.2419.jpg  
/tmp/PetImages/Cat/cat.cat.2049.jpg /tmp/cats-v-dogs/training/cats/cat.2049.jpg  
/tmp/PetImages/Cat/cat.554.jpg /tmp/cats-v-dogs/training/cats/cat.554.jpg  
/tmp/PetImages/Cat/cat.80.jpg /tmp/cats-v-dogs/training/cats/cat.80.jpg  
/tmp/PetImages/Cat/cat.734.jpg /tmp/cats-v-dogs/training/cats/cat.734.jpg  
/tmp/PetImages/Cat/cat.2166.jpg /tmp/cats-v-dogs/training/cats/cat.2166.jpg  
/tmp/PetImages/Cat/cat.639.jpg /tmp/cats-v-dogs/training/cats/cat.639.jpg  
/tmp/PetImages/Cat/cat.941.jpg /tmp/cats-v-dogs/training/cats/cat.941.jpg  
/tmp/PetImages/Cat/cat.474.jpg /tmp/cats-v-dogs/training/cats/cat.474.jpg  
/tmp/PetImages/Cat/cat.2033.jpg /tmp/cats-v-dogs/training/cats/cat.2033.jpg  
/tmp/PetImages/Cat/cat.744.jpg /tmp/cats-v-dogs/training/cats/cat.744.jpg  
/tmp/PetImages/Cat/cat.340.jpg /tmp/cats-v-dogs/training/cats/cat.340.jpg  
/tmp/PetImages/Cat/cat.2321.jpg /tmp/cats-v-dogs/training/cats/cat.2321.jpg  
/tmp/PetImages/Cat/cat.767.jpg /tmp/cats-v-dogs/training/cats/cat.767.jpg  
/tmp/PetImages/Cat/cat.823.jpg /tmp/cats-v-dogs/training/cats/cat.823.jpg  
/tmp/PetImages/Cat/cat.772.jpg /tmp/cats-v-dogs/training/cats/cat.772.jpg  
/tmp/PetImages/Cat/cat.153.jpg /tmp/cats-v-dogs/training/cats/cat.153.jpg  
/tmp/PetImages/Cat/cat.594.jpg /tmp/cats-v-dogs/training/cats/cat.594.jpg  
/tmp/PetImages/Cat/cat.948.jpg /tmp/cats-v-dogs/training/cats/cat.948.jpg  
/tmp/PetImages/Cat/cat.850.jpg /tmp/cats-v-dogs/training/cats/cat.850.jpg  
/tmp/PetImages/Cat/cat.204.jpg /tmp/cats-v-dogs/training/cats/cat.204.jpg  
/tmp/PetImages/Cat/cat.932.jpg /tmp/cats-v-dogs/training/cats/cat.932.jpg  
/tmp/PetImages/Cat/cat.168.jpg /tmp/cats-v-dogs/training/cats/cat.168.jpg  
/tmp/PetImages/Cat/cat.2123.jpg /tmp/cats-v-dogs/training/cats/cat.2123.jpg  
/tmp/PetImages/Cat/cat.34.jpg /tmp/cats-v-dogs/training/cats/cat.34.jpg  
/tmp/PetImages/Cat/cat.2037.jpg /tmp/cats-v-dogs/training/cats/cat.2037.jpg  
/tmp/PetImages/Cat/cat.2098.jpg /tmp/cats-v-dogs/training/cats/cat.2098.jpg  
/tmp/PetImages/Cat/cat.703.jpg /tmp/cats-v-dogs/training/cats/cat.703.jpg  
/tmp/PetImages/Cat/cat.779.jpg /tmp/cats-v-dogs/training/cats/cat.779.jpg  
/tmp/PetImages/Cat/cat.742.jpg /tmp/cats-v-dogs/training/cats/cat.742.jpg  
/tmp/PetImages/Cat/cat.436.jpg /tmp/cats-v-dogs/training/cats/cat.436.jpg  
/tmp/PetImages/Cat/cat.491.jpg /tmp/cats-v-dogs/training/cats/cat.491.jpg  
/tmp/PetImages/Cat/cat.2197.jpg /tmp/cats-v-dogs/training/cats/cat.2197.jpg  
/tmp/PetImages/Cat/cat.2203.jpg /tmp/cats-v-dogs/training/cats/cat.2203.jpg  
/tmp/PetImages/Cat/cat.829.jpg /tmp/cats-v-dogs/training/cats/cat.829.jpg  
/tmp/PetImages/Cat/cat.2298.jpg /tmp/cats-v-dogs/training/cats/cat.2298.jpg  
/tmp/PetImages/Cat/cat.123.jpg /tmp/cats-v-dogs/training/cats/cat.123.jpg  
/tmp/PetImages/Cat/cat.2342.jpg /tmp/cats-v-dogs/training/cats/cat.2342.jpg  
/tmp/PetImages/Cat/cat.144.jpg /tmp/cats-v-dogs/training/cats/cat.144.jpg  
/tmp/PetImages/Cat/cat.214.jpg /tmp/cats-v-dogs/training/cats/cat.214.jpg  
/tmp/PetImages/Cat/cat.2493.jpg /tmp/cats-v-dogs/training/cats/cat.2493.jpg  
/tmp/PetImages/Cat/cat.134.jpg /tmp/cats-v-dogs/training/cats/cat.134.jpg  
/tmp/PetImages/Cat/cat.2209.jpg /tmp/cats-v-dogs/training/cats/cat.2209.jpg  
/tmp/PetImages/Cat/cat.2280.jpg /tmp/cats-v-dogs/training/cats/cat.2280.jpg  
/tmp/PetImages/Cat/cat.2344.jpg /tmp/cats-v-dogs/training/cats/cat.2344.jpg  
/tmp/PetImages/Cat/cat.2112.jpg /tmp/cats-v-dogs/training/cats/cat.2112.jpg  
/tmp/PetImages/Cat/cat.65.jpg /tmp/cats-v-dogs/training/cats/cat.65.jpg  
/tmp/PetImages/Cat/cat.2367.jpg /tmp/cats-v-dogs/training/cats/cat.2367.jpg  
/tmp/PetImages/Cat/cat.2078.jpg /tmp/cats-v-dogs/training/cats/cat.2078.jpg  
/tmp/PetImages/Cat/cat.85.jpg /tmp/cats-v-dogs/training/cats/cat.85.jpg  
/tmp/PetImages/Cat/cat.2416.jpg /tmp/cats-v-dogs/training/cats/cat.2416.jpg  
/tmp/PetImages/Cat/cat.450.jpg /tmp/cats-v-dogs/training/cats/cat.450.jpg  
/tmp/PetImages/Cat/cat.84.jpg /tmp/cats-v-dogs/training/cats/cat.84.jpg  
/tmp/PetImages/Cat/cat.794.jpg /tmp/cats-v-dogs/training/cats/cat.794.jpg  
/tmp/PetImages/Cat/cat.137.jpg /tmp/cats-v-dogs/training/cats/cat.137.jpg  
/tmp/PetImages/Cat/cat.654.jpg /tmp/cats-v-dogs/training/cats/cat.654.jpg  
/tmp/PetImages/Cat/cat.505.jpg /tmp/cats-v-dogs/training/cats/cat.505.jpg  
/tmp/PetImages/Cat/cat.231.jpg /tmp/cats-v-dogs/training/cats/cat.231.jpg  
/tmp/PetImages/Cat/cat.301.jpg /tmp/cats-v-dogs/training/cats/cat.301.jpg  
/tmp/PetImages/Cat/cat.2134.jpg /tmp/cats-v-dogs/training/cats/cat.2134.jpg  
/tmp/PetImages/Cat/cat.2068.jpg /tmp/cats-v-dogs/training/cats/cat.2068.jpg  
/tmp/PetImages/Cat/cat.2180.jpg /tmp/cats-v-dogs/training/cats/cat.2180.jpg  
/tmp/PetImages/Cat/cat.2014.jpg /tmp/cats-v-dogs/training/cats/cat.2014.jpg  
/tmp/PetImages/Cat/cat.400.jpg /tmp/cats-v-dogs/training/cats/cat.400.jpg  
/tmp/PetImages/Cat/cat.821.jpg /tmp/cats-v-dogs/training/cats/cat.821.jpg  
/tmp/PetImages/Cat/cat.2058.jpg /tmp/cats-v-dogs/training/cats/cat.2058.jpg  
/tmp/PetImages/Cat/cat.2126.jpg /tmp/cats-v-dogs/training/cats/cat.2126.jpg  
/tmp/PetImages/Cat/cat.29.jpg /tmp/cats-v-dogs/training/cats/cat.29.jpg  
/tmp/PetImages/Cat/cat.223.jpg /tmp/cats-v-dogs/training/cats/cat.223.jpg  
/tmp/PetImages/Cat/cat.2454.jpg /tmp/cats-v-dogs/training/cats/cat.2454.jpg  
/tmp/PetImages/Cat/cat.845.jpg /tmp/cats-v-dogs/training/cats/cat.845.jpg  
/tmp/PetImages/Cat/cat.36.jpg /tmp/cats-v-dogs/training/cats/cat.36.jpg  
/tmp/PetImages/Cat/cat.529.jpg /tmp/cats-v-dogs/training/cats/cat.529.jpg  
/tmp/PetImages/Cat/cat.944.jpg /tmp/cats-v-dogs/training/cats/cat.944.jpg  
/tmp/PetImages/Cat/cat.56.jpg /tmp/cats-v-dogs/training/cats/cat.56.jpg  
/tmp/PetImages/Cat/cat.64.jpg /tmp/cats-v-dogs/training/cats/cat.64.jpg  
/tmp/PetImages/Cat/cat.838.jpg /tmp/cats-v-dogs/training/cats/cat.838.jpg

/tmp/PetImages/Cat/cat.424.jpg /tmp/cats-v-dogs/training/cats/cat.424.jpg  
/tmp/PetImages/Cat/cat.607.jpg /tmp/cats-v-dogs/training/cats/cat.607.jpg  
/tmp/PetImages/Cat/cat.2327.jpg /tmp/cats-v-dogs/training/cats/cat.2327.jpg  
/tmp/PetImages/Cat/cat.628.jpg /tmp/cats-v-dogs/training/cats/cat.628.jpg  
/tmp/PetImages/Cat/cat.600.jpg /tmp/cats-v-dogs/training/cats/cat.600.jpg  
/tmp/PetImages/Cat/cat.117.jpg /tmp/cats-v-dogs/training/cats/cat.117.jpg  
/tmp/PetImages/Cat/cat.297.jpg /tmp/cats-v-dogs/training/cats/cat.297.jpg  
/tmp/PetImages/Cat/cat.2338.jpg /tmp/cats-v-dogs/training/cats/cat.2338.jpg  
/tmp/PetImages/Cat/cat.437.jpg /tmp/cats-v-dogs/training/cats/cat.437.jpg  
/tmp/PetImages/Cat/cat.992.jpg /tmp/cats-v-dogs/training/cats/cat.992.jpg  
/tmp/PetImages/Cat/cat.201.jpg /tmp/cats-v-dogs/training/cats/cat.201.jpg  
/tmp/PetImages/Cat/cat.2075.jpg /tmp/cats-v-dogs/training/cats/cat.2075.jpg  
/tmp/PetImages/Cat/cat.468.jpg /tmp/cats-v-dogs/training/cats/cat.468.jpg  
/tmp/PetImages/Cat/cat.674.jpg /tmp/cats-v-dogs/training/cats/cat.674.jpg  
/tmp/PetImages/Cat/cat.2383.jpg /tmp/cats-v-dogs/training/cats/cat.2383.jpg  
/tmp/PetImages/Cat/cat.2022.jpg /tmp/cats-v-dogs/training/cats/cat.2022.jpg  
/tmp/PetImages/Cat/cat.2159.jpg /tmp/cats-v-dogs/training/cats/cat.2159.jpg  
/tmp/PetImages/Cat/cat.2006.jpg /tmp/cats-v-dogs/training/cats/cat.2006.jpg  
/tmp/PetImages/Cat/cat.969.jpg /tmp/cats-v-dogs/training/cats/cat.969.jpg  
/tmp/PetImages/Cat/cat.208.jpg /tmp/cats-v-dogs/training/cats/cat.208.jpg  
/tmp/PetImages/Cat/cat.698.jpg /tmp/cats-v-dogs/training/cats/cat.698.jpg  
/tmp/PetImages/Cat/cat.284.jpg /tmp/cats-v-dogs/training/cats/cat.284.jpg  
/tmp/PetImages/Cat/cat.362.jpg /tmp/cats-v-dogs/training/cats/cat.362.jpg  
/tmp/PetImages/Cat/cat.127.jpg /tmp/cats-v-dogs/training/cats/cat.127.jpg  
/tmp/PetImages/Cat/cat.843.jpg /tmp/cats-v-dogs/training/cats/cat.843.jpg  
/tmp/PetImages/Cat/cat.247.jpg /tmp/cats-v-dogs/training/cats/cat.247.jpg  
/tmp/PetImages/Cat/cat.2442.jpg /tmp/cats-v-dogs/training/cats/cat.2442.jpg  
/tmp/PetImages/Cat/cat.660.jpg /tmp/cats-v-dogs/training/cats/cat.660.jpg  
/tmp/PetImages/Cat/cat.868.jpg /tmp/cats-v-dogs/training/cats/cat.868.jpg  
/tmp/PetImages/Cat/cat.304.jpg /tmp/cats-v-dogs/training/cats/cat.304.jpg  
/tmp/PetImages/Cat/cat.2388.jpg /tmp/cats-v-dogs/training/cats/cat.2388.jpg  
/tmp/PetImages/Cat/cat.218.jpg /tmp/cats-v-dogs/training/cats/cat.218.jpg  
/tmp/PetImages/Cat/cat.2293.jpg /tmp/cats-v-dogs/training/cats/cat.2293.jpg  
/tmp/PetImages/Cat/cat.841.jpg /tmp/cats-v-dogs/training/cats/cat.841.jpg  
/tmp/PetImages/Cat/cat.226.jpg /tmp/cats-v-dogs/training/cats/cat.226.jpg  
/tmp/PetImages/Cat/cat.786.jpg /tmp/cats-v-dogs/training/cats/cat.786.jpg  
/tmp/PetImages/Cat/cat.324.jpg /tmp/cats-v-dogs/training/cats/cat.324.jpg  
/tmp/PetImages/Cat/cat.245.jpg /tmp/cats-v-dogs/training/cats/cat.245.jpg  
/tmp/PetImages/Cat/cat.2050.jpg /tmp/cats-v-dogs/training/cats/cat.2050.jpg  
/tmp/PetImages/Cat/cat.50.jpg /tmp/cats-v-dogs/training/cats/cat.50.jpg  
/tmp/PetImages/Cat/cat.287.jpg /tmp/cats-v-dogs/training/cats/cat.287.jpg  
/tmp/PetImages/Cat/cat.677.jpg /tmp/cats-v-dogs/training/cats/cat.677.jpg  
/tmp/PetImages/Cat/cat.2345.jpg /tmp/cats-v-dogs/training/cats/cat.2345.jpg  
/tmp/PetImages/Cat/cat.88.jpg /tmp/cats-v-dogs/training/cats/cat.88.jpg  
/tmp/PetImages/Cat/cat.2490.jpg /tmp/cats-v-dogs/training/cats/cat.2490.jpg  
/tmp/PetImages/Cat/cat.45.jpg /tmp/cats-v-dogs/training/cats/cat.45.jpg  
/tmp/PetImages/Cat/cat.2163.jpg /tmp/cats-v-dogs/training/cats/cat.2163.jpg  
/tmp/PetImages/Cat/cat.136.jpg /tmp/cats-v-dogs/training/cats/cat.136.jpg  
/tmp/PetImages/Cat/cat.478.jpg /tmp/cats-v-dogs/training/cats/cat.478.jpg  
/tmp/PetImages/Cat/cat.345.jpg /tmp/cats-v-dogs/training/cats/cat.345.jpg  
/tmp/PetImages/Cat/cat.372.jpg /tmp/cats-v-dogs/training/cats/cat.372.jpg  
/tmp/PetImages/Cat/cat.719.jpg /tmp/cats-v-dogs/training/cats/cat.719.jpg  
/tmp/PetImages/Cat/cat.989.jpg /tmp/cats-v-dogs/training/cats/cat.989.jpg  
/tmp/PetImages/Cat/cat.458.jpg /tmp/cats-v-dogs/training/cats/cat.458.jpg  
/tmp/PetImages/Cat/cat.558.jpg /tmp/cats-v-dogs/training/cats/cat.558.jpg  
/tmp/PetImages/Cat/cat.2029.jpg /tmp/cats-v-dogs/training/cats/cat.2029.jpg  
/tmp/PetImages/Cat/cat.531.jpg /tmp/cats-v-dogs/training/cats/cat.531.jpg  
/tmp/PetImages/Cat/cat.2000.jpg /tmp/cats-v-dogs/training/cats/cat.2000.jpg  
/tmp/PetImages/Cat/cat.942.jpg /tmp/cats-v-dogs/training/cats/cat.942.jpg  
/tmp/PetImages/Cat/cat.556.jpg /tmp/cats-v-dogs/training/cats/cat.556.jpg  
/tmp/PetImages/Cat/cat.962.jpg /tmp/cats-v-dogs/training/cats/cat.962.jpg  
/tmp/PetImages/Cat/cat.2296.jpg /tmp/cats-v-dogs/training/cats/cat.2296.jpg  
/tmp/PetImages/Cat/cat.2114.jpg /tmp/cats-v-dogs/training/cats/cat.2114.jpg  
/tmp/PetImages/Cat/cat.19.jpg /tmp/cats-v-dogs/training/cats/cat.19.jpg  
/tmp/PetImages/Cat/cat.2287.jpg /tmp/cats-v-dogs/training/cats/cat.2287.jpg  
/tmp/PetImages/Cat/cat.2485.jpg /tmp/cats-v-dogs/training/cats/cat.2485.jpg  
/tmp/PetImages/Cat/cat.999.jpg /tmp/cats-v-dogs/training/cats/cat.999.jpg  
/tmp/PetImages/Cat/cat.328.jpg /tmp/cats-v-dogs/training/cats/cat.328.jpg  
/tmp/PetImages/Cat/cat.2102.jpg /tmp/cats-v-dogs/training/cats/cat.2102.jpg  
/tmp/PetImages/Cat/cat.22.jpg /tmp/cats-v-dogs/training/cats/cat.22.jpg  
/tmp/PetImages/Cat/cat.704.jpg /tmp/cats-v-dogs/training/cats/cat.704.jpg  
/tmp/PetImages/Cat/cat.407.jpg /tmp/cats-v-dogs/training/cats/cat.407.jpg  
/tmp/PetImages/Cat/cat.299.jpg /tmp/cats-v-dogs/training/cats/cat.299.jpg  
/tmp/PetImages/Cat/cat.2032.jpg /tmp/cats-v-dogs/training/cats/cat.2032.jpg  
/tmp/PetImages/Cat/cat.74.jpg /tmp/cats-v-dogs/training/cats/cat.74.jpg  
/tmp/PetImages/Cat/cat.2055.jpg /tmp/cats-v-dogs/training/cats/cat.2055.jpg  
/tmp/PetImages/Cat/cat.2444.jpg /tmp/cats-v-dogs/training/cats/cat.2444.jpg

/tmp/PetImages/Cat/cat.2395.jpg /tmp/cats-v-dogs/training/cats/cat.2395.jpg  
/tmp/PetImages/Cat/cat.229.jpg /tmp/cats-v-dogs/training/cats/cat.229.jpg  
/tmp/PetImages/Cat/cat.382.jpg /tmp/cats-v-dogs/training/cats/cat.382.jpg  
/tmp/PetImages/Cat/cat.2346.jpg /tmp/cats-v-dogs/training/cats/cat.2346.jpg  
/tmp/PetImages/Cat/cat.958.jpg /tmp/cats-v-dogs/training/cats/cat.958.jpg  
/tmp/PetImages/Cat/cat.642.jpg /tmp/cats-v-dogs/training/cats/cat.642.jpg  
/tmp/PetImages/Cat/cat.2279.jpg /tmp/cats-v-dogs/training/cats/cat.2279.jpg  
/tmp/PetImages/Cat/cat.2278.jpg /tmp/cats-v-dogs/training/cats/cat.2278.jpg  
/tmp/PetImages/Cat/cat.957.jpg /tmp/cats-v-dogs/training/cats/cat.957.jpg  
/tmp/PetImages/Cat/cat.0.jpg /tmp/cats-v-dogs/training/cats/cat.0.jpg  
/tmp/PetImages/Cat/cat.559.jpg /tmp/cats-v-dogs/training/cats/cat.559.jpg  
/tmp/PetImages/Cat/cat.264.jpg /tmp/cats-v-dogs/training/cats/cat.264.jpg  
/tmp/PetImages/Cat/cat.762.jpg /tmp/cats-v-dogs/training/cats/cat.762.jpg  
/tmp/PetImages/Cat/cat.934.jpg /tmp/cats-v-dogs/training/cats/cat.934.jpg  
/tmp/PetImages/Cat/cat.2315.jpg /tmp/cats-v-dogs/training/cats/cat.2315.jpg  
/tmp/PetImages/Cat/cat.416.jpg /tmp/cats-v-dogs/training/cats/cat.416.jpg  
/tmp/PetImages/Cat/cat.608.jpg /tmp/cats-v-dogs/training/cats/cat.608.jpg  
/tmp/PetImages/Cat/cat.2105.jpg /tmp/cats-v-dogs/training/cats/cat.2105.jpg  
/tmp/PetImages/Cat/cat.2265.jpg /tmp/cats-v-dogs/training/cats/cat.2265.jpg  
/tmp/PetImages/Cat/cat.922.jpg /tmp/cats-v-dogs/training/cats/cat.922.jpg  
/tmp/PetImages/Cat/cat.4.jpg /tmp/cats-v-dogs/training/cats/cat.4.jpg  
/tmp/PetImages/Cat/cat.2498.jpg /tmp/cats-v-dogs/training/cats/cat.2498.jpg  
/tmp/PetImages/Cat/cat.106.jpg /tmp/cats-v-dogs/training/cats/cat.106.jpg  
/tmp/PetImages/Cat/cat.890.jpg /tmp/cats-v-dogs/training/cats/cat.890.jpg  
/tmp/PetImages/Cat/cat.2233.jpg /tmp/cats-v-dogs/training/cats/cat.2233.jpg  
/tmp/PetImages/Cat/cat.89.jpg /tmp/cats-v-dogs/training/cats/cat.89.jpg  
/tmp/PetImages/Cat/cat.241.jpg /tmp/cats-v-dogs/training/cats/cat.241.jpg  
/tmp/PetImages/Cat/cat.501.jpg /tmp/cats-v-dogs/training/cats/cat.501.jpg  
/tmp/PetImages/Cat/cat.159.jpg /tmp/cats-v-dogs/training/cats/cat.159.jpg  
/tmp/PetImages/Cat/cat.212.jpg /tmp/cats-v-dogs/training/cats/cat.212.jpg  
/tmp/PetImages/Cat/cat.198.jpg /tmp/cats-v-dogs/training/cats/cat.198.jpg  
/tmp/PetImages/Cat/cat.2459.jpg /tmp/cats-v-dogs/training/cats/cat.2459.jpg  
/tmp/PetImages/Cat/cat.724.jpg /tmp/cats-v-dogs/training/cats/cat.724.jpg  
/tmp/PetImages/Cat/cat.377.jpg /tmp/cats-v-dogs/training/cats/cat.377.jpg  
/tmp/PetImages/Cat/cat.274.jpg /tmp/cats-v-dogs/training/cats/cat.274.jpg  
/tmp/PetImages/Cat/cat.732.jpg /tmp/cats-v-dogs/training/cats/cat.732.jpg  
/tmp/PetImages/Cat/cat.2254.jpg /tmp/cats-v-dogs/training/cats/cat.2254.jpg  
/tmp/PetImages/Cat/cat.2308.jpg /tmp/cats-v-dogs/training/cats/cat.2308.jpg  
/tmp/PetImages/Cat/cat.356.jpg /tmp/cats-v-dogs/training/cats/cat.356.jpg  
/tmp/PetImages/Cat/cat.923.jpg /tmp/cats-v-dogs/training/cats/cat.923.jpg  
/tmp/PetImages/Cat/cat.2127.jpg /tmp/cats-v-dogs/training/cats/cat.2127.jpg  
/tmp/PetImages/Cat/cat.2413.jpg /tmp/cats-v-dogs/training/cats/cat.2413.jpg  
/tmp/PetImages/Cat/cat.759.jpg /tmp/cats-v-dogs/training/cats/cat.759.jpg  
/tmp/PetImages/Cat/cat.140.jpg /tmp/cats-v-dogs/training/cats/cat.140.jpg  
/tmp/PetImages/Cat/cat.2231.jpg /tmp/cats-v-dogs/training/cats/cat.2231.jpg  
/tmp/PetImages/Cat/cat.896.jpg /tmp/cats-v-dogs/training/cats/cat.896.jpg  
/tmp/PetImages/Cat/cat.63.jpg /tmp/cats-v-dogs/training/cats/cat.63.jpg  
/tmp/PetImages/Cat/cat.2174.jpg /tmp/cats-v-dogs/training/cats/cat.2174.jpg  
/tmp/PetImages/Cat/cat.522.jpg /tmp/cats-v-dogs/training/cats/cat.522.jpg  
/tmp/PetImages/Cat/cat.819.jpg /tmp/cats-v-dogs/training/cats/cat.819.jpg  
/tmp/PetImages/Cat/cat.2366.jpg /tmp/cats-v-dogs/training/cats/cat.2366.jpg  
/tmp/PetImages/Cat/cat.2090.jpg /tmp/cats-v-dogs/training/cats/cat.2090.jpg  
/tmp/PetImages/Cat/cat.182.jpg /tmp/cats-v-dogs/training/cats/cat.182.jpg  
/tmp/PetImages/Cat/cat.775.jpg /tmp/cats-v-dogs/training/cats/cat.775.jpg  
/tmp/PetImages/Cat/cat.2290.jpg /tmp/cats-v-dogs/training/cats/cat.2290.jpg  
/tmp/PetImages/Cat/cat.832.jpg /tmp/cats-v-dogs/training/cats/cat.832.jpg  
/tmp/PetImages/Cat/cat.2470.jpg /tmp/cats-v-dogs/training/cats/cat.2470.jpg  
/tmp/PetImages/Cat/cat.2042.jpg /tmp/cats-v-dogs/training/cats/cat.2042.jpg  
/tmp/PetImages/Cat/cat.722.jpg /tmp/cats-v-dogs/training/cats/cat.722.jpg  
/tmp/PetImages/Cat/cat.192.jpg /tmp/cats-v-dogs/training/cats/cat.192.jpg  
/tmp/PetImages/Cat/cat.2392.jpg /tmp/cats-v-dogs/training/cats/cat.2392.jpg  
/tmp/PetImages/Cat/cat.486.jpg /tmp/cats-v-dogs/training/cats/cat.486.jpg  
/tmp/PetImages/Cat/cat.2157.jpg /tmp/cats-v-dogs/training/cats/cat.2157.jpg  
/tmp/PetImages/Cat/cat.984.jpg /tmp/cats-v-dogs/training/cats/cat.984.jpg  
/tmp/PetImages/Cat/cat.625.jpg /tmp/cats-v-dogs/training/cats/cat.625.jpg  
/tmp/PetImages/Cat/cat.342.jpg /tmp/cats-v-dogs/training/cats/cat.342.jpg  
/tmp/PetImages/Cat/cat.206.jpg /tmp/cats-v-dogs/training/cats/cat.206.jpg  
/tmp/PetImages/Cat/cat.258.jpg /tmp/cats-v-dogs/training/cats/cat.258.jpg  
/tmp/PetImages/Cat/cat.661.jpg /tmp/cats-v-dogs/training/cats/cat.661.jpg  
/tmp/PetImages/Cat/cat.566.jpg /tmp/cats-v-dogs/training/cats/cat.566.jpg  
/tmp/PetImages/Cat/cat.141.jpg /tmp/cats-v-dogs/training/cats/cat.141.jpg  
/tmp/PetImages/Cat/cat.2182.jpg /tmp/cats-v-dogs/training/cats/cat.2182.jpg  
/tmp/PetImages/Cat/cat.432.jpg /tmp/cats-v-dogs/training/cats/cat.432.jpg  
/tmp/PetImages/Cat/cat.680.jpg /tmp/cats-v-dogs/training/cats/cat.680.jpg  
/tmp/PetImages/Cat/cat.780.jpg /tmp/cats-v-dogs/training/cats/cat.780.jpg  
/tmp/PetImages/Cat/cat.446.jpg /tmp/cats-v-dogs/training/cats/cat.446.jpg  
/tmp/PetImages/Cat/cat.2427.jpg /tmp/cats-v-dogs/training/cats/cat.2427.jpg

/tmp/PetImages/Cat/cat.33.jpg /tmp/cats-v-dogs/training/cats/cat.33.jpg  
/tmp/PetImages/Cat/cat.2124.jpg /tmp/cats-v-dogs/training/cats/cat.2124.jpg  
/tmp/PetImages/Cat/cat.2201.jpg /tmp/cats-v-dogs/training/cats/cat.2201.jpg  
/tmp/PetImages/Cat/cat.919.jpg /tmp/cats-v-dogs/training/cats/cat.919.jpg  
/tmp/PetImages/Cat/cat.710.jpg /tmp/cats-v-dogs/training/cats/cat.710.jpg  
/tmp/PetImages/Cat/cat.2117.jpg /tmp/cats-v-dogs/training/cats/cat.2117.jpg  
/tmp/PetImages/Cat/cat.2331.jpg /tmp/cats-v-dogs/training/cats/cat.2331.jpg  
/tmp/PetImages/Cat/cat.423.jpg /tmp/cats-v-dogs/training/cats/cat.423.jpg  
/tmp/PetImages/Cat/cat.747.jpg /tmp/cats-v-dogs/training/cats/cat.747.jpg  
/tmp/PetImages/Cat/cat.2479.jpg /tmp/cats-v-dogs/training/cats/cat.2479.jpg  
/tmp/PetImages/Cat/cat.472.jpg /tmp/cats-v-dogs/training/cats/cat.472.jpg  
/tmp/PetImages/Cat/cat.507.jpg /tmp/cats-v-dogs/training/cats/cat.507.jpg  
/tmp/PetImages/Cat/cat.521.jpg /tmp/cats-v-dogs/training/cats/cat.521.jpg  
/tmp/PetImages/Cat/cat.939.jpg /tmp/cats-v-dogs/training/cats/cat.939.jpg  
/tmp/PetImages/Cat/cat.428.jpg /tmp/cats-v-dogs/training/cats/cat.428.jpg  
/tmp/PetImages/Cat/cat.835.jpg /tmp/cats-v-dogs/training/cats/cat.835.jpg  
/tmp/PetImages/Cat/cat.579.jpg /tmp/cats-v-dogs/training/cats/cat.579.jpg  
/tmp/PetImages/Cat/cat.2464.jpg /tmp/cats-v-dogs/training/cats/cat.2464.jpg  
/tmp/PetImages/Cat/cat.588.jpg /tmp/cats-v-dogs/training/cats/cat.588.jpg  
/tmp/PetImages/Cat/cat.2257.jpg /tmp/cats-v-dogs/training/cats/cat.2257.jpg  
/tmp/PetImages/Cat/cat.2208.jpg /tmp/cats-v-dogs/training/cats/cat.2208.jpg  
/tmp/PetImages/Cat/cat.688.jpg /tmp/cats-v-dogs/training/cats/cat.688.jpg  
/tmp/PetImages/Cat/cat.2151.jpg /tmp/cats-v-dogs/training/cats/cat.2151.jpg  
/tmp/PetImages/Cat/cat.30.jpg /tmp/cats-v-dogs/training/cats/cat.30.jpg  
/tmp/PetImages/Cat/cat.409.jpg /tmp/cats-v-dogs/training/cats/cat.409.jpg  
/tmp/PetImages/Cat/cat.617.jpg /tmp/cats-v-dogs/training/cats/cat.617.jpg  
/tmp/PetImages/Cat/cat.43.jpg /tmp/cats-v-dogs/training/cats/cat.43.jpg  
/tmp/PetImages/Cat/cat.2335.jpg /tmp/cats-v-dogs/training/cats/cat.2335.jpg  
/tmp/PetImages/Cat/cat.538.jpg /tmp/cats-v-dogs/training/cats/cat.538.jpg  
/tmp/PetImages/Cat/cat.851.jpg /tmp/cats-v-dogs/training/cats/cat.851.jpg  
/tmp/PetImages/Cat/cat.2067.jpg /tmp/cats-v-dogs/training/cats/cat.2067.jpg  
/tmp/PetImages/Cat/cat.2452.jpg /tmp/cats-v-dogs/training/cats/cat.2452.jpg  
/tmp/PetImages/Cat/cat.2483.jpg /tmp/cats-v-dogs/training/cats/cat.2483.jpg  
/tmp/PetImages/Cat/cat.528.jpg /tmp/cats-v-dogs/training/cats/cat.528.jpg  
/tmp/PetImages/Cat/cat.107.jpg /tmp/cats-v-dogs/training/cats/cat.107.jpg  
/tmp/PetImages/Cat/cat.394.jpg /tmp/cats-v-dogs/training/cats/cat.394.jpg  
/tmp/PetImages/Dog/dog.856.jpg /tmp/cats-v-dogs/training/dogs/dog.856.jpg  
/tmp/PetImages/Dog/dog.924.jpg /tmp/cats-v-dogs/training/dogs/dog.924.jpg  
/tmp/PetImages/Dog/dog.450.jpg /tmp/cats-v-dogs/training/dogs/dog.450.jpg  
/tmp/PetImages/Dog/dog.522.jpg /tmp/cats-v-dogs/training/dogs/dog.522.jpg  
/tmp/PetImages/Dog/dog.659.jpg /tmp/cats-v-dogs/training/dogs/dog.659.jpg  
/tmp/PetImages/Dog/dog.23.jpg /tmp/cats-v-dogs/training/dogs/dog.23.jpg  
/tmp/PetImages/Dog/dog.699.jpg /tmp/cats-v-dogs/training/dogs/dog.699.jpg  
/tmp/PetImages/Dog/dog.702.jpg /tmp/cats-v-dogs/training/dogs/dog.702.jpg  
/tmp/PetImages/Dog/dog.209.jpg /tmp/cats-v-dogs/training/dogs/dog.209.jpg  
/tmp/PetImages/Dog/dog.268.jpg /tmp/cats-v-dogs/training/dogs/dog.268.jpg  
/tmp/PetImages/Dog/dog.750.jpg /tmp/cats-v-dogs/training/dogs/dog.750.jpg  
/tmp/PetImages/Dog/dog.309.jpg /tmp/cats-v-dogs/training/dogs/dog.309.jpg  
/tmp/PetImages/Dog/dog.308.jpg /tmp/cats-v-dogs/training/dogs/dog.308.jpg  
/tmp/PetImages/Dog/dog.642.jpg /tmp/cats-v-dogs/training/dogs/dog.642.jpg  
/tmp/PetImages/Dog/dog.2252.jpg /tmp/cats-v-dogs/training/dogs/dog.2252.jpg  
/tmp/PetImages/Dog/dog.608.jpg /tmp/cats-v-dogs/training/dogs/dog.608.jpg  
/tmp/PetImages/Dog/dog.170.jpg /tmp/cats-v-dogs/training/dogs/dog.170.jpg  
/tmp/PetImages/Dog/dog.843.jpg /tmp/cats-v-dogs/training/dogs/dog.843.jpg  
/tmp/PetImages/Dog/dog.893.jpg /tmp/cats-v-dogs/training/dogs/dog.893.jpg  
/tmp/PetImages/Dog/dog.389.jpg /tmp/cats-v-dogs/training/dogs/dog.389.jpg  
/tmp/PetImages/Dog/dog.2219.jpg /tmp/cats-v-dogs/training/dogs/dog.2219.jpg  
/tmp/PetImages/Dog/dog.239.jpg /tmp/cats-v-dogs/training/dogs/dog.239.jpg  
/tmp/PetImages/Dog/dog.2382.jpg /tmp/cats-v-dogs/training/dogs/dog.2382.jpg  
/tmp/PetImages/Dog/dog.210.jpg /tmp/cats-v-dogs/training/dogs/dog.210.jpg  
/tmp/PetImages/Dog/dog.302.jpg /tmp/cats-v-dogs/training/dogs/dog.302.jpg  
/tmp/PetImages/Dog/dog.119.jpg /tmp/cats-v-dogs/training/dogs/dog.119.jpg  
/tmp/PetImages/Dog/dog.612.jpg /tmp/cats-v-dogs/training/dogs/dog.612.jpg  
/tmp/PetImages/Dog/dog.478.jpg /tmp/cats-v-dogs/training/dogs/dog.478.jpg  
/tmp/PetImages/Dog/dog.596.jpg /tmp/cats-v-dogs/training/dogs/dog.596.jpg  
/tmp/PetImages/Dog/dog.198.jpg /tmp/cats-v-dogs/training/dogs/dog.198.jpg  
/tmp/PetImages/Dog/dog.383.jpg /tmp/cats-v-dogs/training/dogs/dog.383.jpg  
/tmp/PetImages/Dog/dog.202.jpg /tmp/cats-v-dogs/training/dogs/dog.202.jpg  
/tmp/PetImages/Dog/dog.628.jpg /tmp/cats-v-dogs/training/dogs/dog.628.jpg  
/tmp/PetImages/Dog/dog.946.jpg /tmp/cats-v-dogs/training/dogs/dog.946.jpg  
/tmp/PetImages/Dog/dog.120.jpg /tmp/cats-v-dogs/training/dogs/dog.120.jpg  
/tmp/PetImages/Dog/dog.511.jpg /tmp/cats-v-dogs/training/dogs/dog.511.jpg  
/tmp/PetImages/Dog/dog.975.jpg /tmp/cats-v-dogs/training/dogs/dog.975.jpg  
/tmp/PetImages/Dog/dog.456.jpg /tmp/cats-v-dogs/training/dogs/dog.456.jpg  
/tmp/PetImages/Dog/dog.2175.jpg /tmp/cats-v-dogs/training/dogs/dog.2175.jpg  
/tmp/PetImages/Dog/dog.558.jpg /tmp/cats-v-dogs/training/dogs/dog.558.jpg  
/tmp/PetImages/Dog/dog.2131.jpg /tmp/cats-v-dogs/training/dogs/dog.2131.jpg

[illegible]

[illegible]

[illegible]

[illegible]



[illegible]

/tmp/PetImages/Dog/dog.2310.jpg /tmp/cats-v-dogs/training/dogs/dog.2310.jpg  
/tmp/PetImages/Dog/dog.875.jpg /tmp/cats-v-dogs/training/dogs/dog.875.jpg  
/tmp/PetImages/Dog/dog.484.jpg /tmp/cats-v-dogs/training/dogs/dog.484.jpg  
/tmp/PetImages/Dog/dog.2006.jpg /tmp/cats-v-dogs/training/dogs/dog.2006.jpg  
/tmp/PetImages/Dog/dog.2123.jpg /tmp/cats-v-dogs/training/dogs/dog.2123.jpg  
/tmp/PetImages/Dog/dog.877.jpg /tmp/cats-v-dogs/training/dogs/dog.877.jpg  
/tmp/PetImages/Dog/dog.729.jpg /tmp/cats-v-dogs/training/dogs/dog.729.jpg  
/tmp/PetImages/Dog/dog.960.jpg /tmp/cats-v-dogs/training/dogs/dog.960.jpg  
/tmp/PetImages/Dog/dog.25.jpg /tmp/cats-v-dogs/training/dogs/dog.25.jpg  
/tmp/PetImages/Dog/dog.2033.jpg /tmp/cats-v-dogs/training/dogs/dog.2033.jpg  
/tmp/PetImages/Dog/dog.631.jpg /tmp/cats-v-dogs/training/dogs/dog.631.jpg  
/tmp/PetImages/Dog/dog.533.jpg /tmp/cats-v-dogs/training/dogs/dog.533.jpg  
/tmp/PetImages/Dog/dog.110.jpg /tmp/cats-v-dogs/training/dogs/dog.110.jpg  
/tmp/PetImages/Dog/dog.336.jpg /tmp/cats-v-dogs/training/dogs/dog.336.jpg  
/tmp/PetImages/Dog/dog.2156.jpg /tmp/cats-v-dogs/training/dogs/dog.2156.jpg  
/tmp/PetImages/Dog/dog.501.jpg /tmp/cats-v-dogs/training/dogs/dog.501.jpg  
/tmp/PetImages/Dog/dog.2234.jpg /tmp/cats-v-dogs/training/dogs/dog.2234.jpg  
/tmp/PetImages/Dog/dog.2030.jpg /tmp/cats-v-dogs/training/dogs/dog.2030.jpg  
/tmp/PetImages/Dog/dog.372.jpg /tmp/cats-v-dogs/training/dogs/dog.372.jpg  
/tmp/PetImages/Dog/dog.2250.jpg /tmp/cats-v-dogs/training/dogs/dog.2250.jpg  
/tmp/PetImages/Dog/dog.781.jpg /tmp/cats-v-dogs/training/dogs/dog.781.jpg  
/tmp/PetImages/Dog/dog.580.jpg /tmp/cats-v-dogs/training/dogs/dog.580.jpg  
/tmp/PetImages/Dog/dog.616.jpg /tmp/cats-v-dogs/training/dogs/dog.616.jpg  
/tmp/PetImages/Dog/dog.2463.jpg /tmp/cats-v-dogs/training/dogs/dog.2463.jpg  
/tmp/PetImages/Dog/dog.2342.jpg /tmp/cats-v-dogs/training/dogs/dog.2342.jpg  
/tmp/PetImages/Dog/dog.2003.jpg /tmp/cats-v-dogs/training/dogs/dog.2003.jpg  
/tmp/PetImages/Dog/dog.896.jpg /tmp/cats-v-dogs/training/dogs/dog.896.jpg  
/tmp/PetImages/Dog/dog.747.jpg /tmp/cats-v-dogs/training/dogs/dog.747.jpg  
/tmp/PetImages/Dog/dog.2215.jpg /tmp/cats-v-dogs/training/dogs/dog.2215.jpg  
/tmp/PetImages/Dog/dog.380.jpg /tmp/cats-v-dogs/training/dogs/dog.380.jpg  
/tmp/PetImages/Dog/dog.2046.jpg /tmp/cats-v-dogs/training/dogs/dog.2046.jpg  
/tmp/PetImages/Dog/dog.588.jpg /tmp/cats-v-dogs/training/dogs/dog.588.jpg  
/tmp/PetImages/Dog/dog.86.jpg /tmp/cats-v-dogs/training/dogs/dog.86.jpg  
/tmp/PetImages/Dog/dog.882.jpg /tmp/cats-v-dogs/training/dogs/dog.882.jpg  
/tmp/PetImages/Dog/dog.2488.jpg /tmp/cats-v-dogs/training/dogs/dog.2488.jpg  
/tmp/PetImages/Dog/dog.374.jpg /tmp/cats-v-dogs/training/dogs/dog.374.jpg  
/tmp/PetImages/Dog/dog.136.jpg /tmp/cats-v-dogs/training/dogs/dog.136.jpg  
/tmp/PetImages/Dog/dog.447.jpg /tmp/cats-v-dogs/training/dogs/dog.447.jpg  
/tmp/PetImages/Dog/dog.828.jpg /tmp/cats-v-dogs/training/dogs/dog.828.jpg  
/tmp/PetImages/Dog/dog.2058.jpg /tmp/cats-v-dogs/training/dogs/dog.2058.jpg  
/tmp/PetImages/Dog/dog.200.jpg /tmp/cats-v-dogs/training/dogs/dog.200.jpg  
/tmp/PetImages/Dog/dog.2088.jpg /tmp/cats-v-dogs/training/dogs/dog.2088.jpg  
/tmp/PetImages/Dog/dog.607.jpg /tmp/cats-v-dogs/training/dogs/dog.607.jpg  
/tmp/PetImages/Dog/dog.2466.jpg /tmp/cats-v-dogs/training/dogs/dog.2466.jpg  
/tmp/PetImages/Dog/dog.144.jpg /tmp/cats-v-dogs/training/dogs/dog.144.jpg  
/tmp/PetImages/Dog/dog.540.jpg /tmp/cats-v-dogs/training/dogs/dog.540.jpg  
/tmp/PetImages/Dog/dog.638.jpg /tmp/cats-v-dogs/training/dogs/dog.638.jpg  
/tmp/PetImages/Dog/dog.2387.jpg /tmp/cats-v-dogs/training/dogs/dog.2387.jpg  
/tmp/PetImages/Dog/dog.798.jpg /tmp/cats-v-dogs/training/dogs/dog.798.jpg  
/tmp/PetImages/Dog/dog.2204.jpg /tmp/cats-v-dogs/training/dogs/dog.2204.jpg  
/tmp/PetImages/Dog/dog.598.jpg /tmp/cats-v-dogs/training/dogs/dog.598.jpg  
/tmp/PetImages/Dog/dog.784.jpg /tmp/cats-v-dogs/training/dogs/dog.784.jpg  
/tmp/PetImages/Dog/dog.737.jpg /tmp/cats-v-dogs/training/dogs/dog.737.jpg  
/tmp/PetImages/Dog/dog.701.jpg /tmp/cats-v-dogs/training/dogs/dog.701.jpg  
/tmp/PetImages/Dog/dog.2119.jpg /tmp/cats-v-dogs/training/dogs/dog.2119.jpg  
/tmp/PetImages/Dog/dog.921.jpg /tmp/cats-v-dogs/training/dogs/dog.921.jpg  
/tmp/PetImages/Dog/dog.2414.jpg /tmp/cats-v-dogs/training/dogs/dog.2414.jpg  
/tmp/PetImages/Dog/dog.2220.jpg /tmp/cats-v-dogs/training/dogs/dog.2220.jpg  
/tmp/PetImages/Dog/dog.465.jpg /tmp/cats-v-dogs/training/dogs/dog.465.jpg  
/tmp/PetImages/Dog/dog.2457.jpg /tmp/cats-v-dogs/training/dogs/dog.2457.jpg  
/tmp/PetImages/Dog/dog.935.jpg /tmp/cats-v-dogs/training/dogs/dog.935.jpg  
/tmp/PetImages/Dog/dog.864.jpg /tmp/cats-v-dogs/training/dogs/dog.864.jpg  
/tmp/PetImages/Dog/dog.528.jpg /tmp/cats-v-dogs/training/dogs/dog.528.jpg  
/tmp/PetImages/Dog/dog.2214.jpg /tmp/cats-v-dogs/training/dogs/dog.2214.jpg  
/tmp/PetImages/Dog/dog.884.jpg /tmp/cats-v-dogs/training/dogs/dog.884.jpg  
/tmp/PetImages/Dog/dog.2445.jpg /tmp/cats-v-dogs/training/dogs/dog.2445.jpg  
/tmp/PetImages/Dog/dog.2483.jpg /tmp/cats-v-dogs/training/dogs/dog.2483.jpg  
/tmp/PetImages/Dog/dog.2478.jpg /tmp/cats-v-dogs/training/dogs/dog.2478.jpg  
/tmp/PetImages/Dog/dog.11.jpg /tmp/cats-v-dogs/training/dogs/dog.11.jpg  
/tmp/PetImages/Dog/dog.2490.jpg /tmp/cats-v-dogs/training/dogs/dog.2490.jpg  
/tmp/PetImages/Dog/dog.2346.jpg /tmp/cats-v-dogs/training/dogs/dog.2346.jpg  
/tmp/PetImages/Dog/dog.2116.jpg /tmp/cats-v-dogs/training/dogs/dog.2116.jpg  
/tmp/PetImages/Dog/dog.2054.jpg /tmp/cats-v-dogs/training/dogs/dog.2054.jpg  
/tmp/PetImages/Dog/dog.37.jpg /tmp/cats-v-dogs/training/dogs/dog.37.jpg  
/tmp/PetImages/Dog/dog.2077.jpg /tmp/cats-v-dogs/training/dogs/dog.2077.jpg  
/tmp/PetImages/Dog/dog.886.jpg /tmp/cats-v-dogs/training/dogs/dog.886.jpg  
/tmp/PetImages/Dog/dog.543.jpg /tmp/cats-v-dogs/training/dogs/dog.543.jpg

/tmp/PetImages/Dog/dog.155.jpg /tmp/cats-v-dogs/training/dogs/dog.155.jpg  
/tmp/PetImages/Dog/dog.2397.jpg /tmp/cats-v-dogs/training/dogs/dog.2397.jpg  
/tmp/PetImages/Dog/dog.416.jpg /tmp/cats-v-dogs/training/dogs/dog.416.jpg  
/tmp/PetImages/Dog/dog.461.jpg /tmp/cats-v-dogs/training/dogs/dog.461.jpg  
/tmp/PetImages/Dog/dog.2270.jpg /tmp/cats-v-dogs/training/dogs/dog.2270.jpg  
/tmp/PetImages/Dog/dog.727.jpg /tmp/cats-v-dogs/training/dogs/dog.727.jpg  
/tmp/PetImages/Dog/dog.2244.jpg /tmp/cats-v-dogs/training/dogs/dog.2244.jpg  
/tmp/PetImages/Dog/dog.565.jpg /tmp/cats-v-dogs/training/dogs/dog.565.jpg  
/tmp/PetImages/Dog/dog.187.jpg /tmp/cats-v-dogs/training/dogs/dog.187.jpg  
/tmp/PetImages/Dog/dog.996.jpg /tmp/cats-v-dogs/training/dogs/dog.996.jpg  
/tmp/PetImages/Dog/dog.467.jpg /tmp/cats-v-dogs/training/dogs/dog.467.jpg  
/tmp/PetImages/Dog/dog.2468.jpg /tmp/cats-v-dogs/training/dogs/dog.2468.jpg  
/tmp/PetImages/Dog/dog.2040.jpg /tmp/cats-v-dogs/training/dogs/dog.2040.jpg  
/tmp/PetImages/Dog/dog.2359.jpg /tmp/cats-v-dogs/training/dogs/dog.2359.jpg  
/tmp/PetImages/Dog/dog.492.jpg /tmp/cats-v-dogs/training/dogs/dog.492.jpg  
/tmp/PetImages/Dog/dog.2353.jpg /tmp/cats-v-dogs/training/dogs/dog.2353.jpg  
/tmp/PetImages/Dog/dog.241.jpg /tmp/cats-v-dogs/training/dogs/dog.241.jpg  
/tmp/PetImages/Dog/dog.2085.jpg /tmp/cats-v-dogs/training/dogs/dog.2085.jpg  
/tmp/PetImages/Dog/dog.940.jpg /tmp/cats-v-dogs/training/dogs/dog.940.jpg  
/tmp/PetImages/Dog/dog.2303.jpg /tmp/cats-v-dogs/training/dogs/dog.2303.jpg  
/tmp/PetImages/Dog/dog.755.jpg /tmp/cats-v-dogs/training/dogs/dog.755.jpg  
/tmp/PetImages/Dog/dog.2444.jpg /tmp/cats-v-dogs/training/dogs/dog.2444.jpg  
/tmp/PetImages/Dog/dog.2286.jpg /tmp/cats-v-dogs/training/dogs/dog.2286.jpg  
/tmp/PetImages/Dog/dog.150.jpg /tmp/cats-v-dogs/training/dogs/dog.150.jpg  
/tmp/PetImages/Dog/dog.769.jpg /tmp/cats-v-dogs/training/dogs/dog.769.jpg  
/tmp/PetImages/Dog/dog.2411.jpg /tmp/cats-v-dogs/training/dogs/dog.2411.jpg  
/tmp/PetImages/Dog/dog.2391.jpg /tmp/cats-v-dogs/training/dogs/dog.2391.jpg  
/tmp/PetImages/Dog/dog.2188.jpg /tmp/cats-v-dogs/training/dogs/dog.2188.jpg  
/tmp/PetImages/Dog/dog.214.jpg /tmp/cats-v-dogs/training/dogs/dog.214.jpg  
/tmp/PetImages/Dog/dog.641.jpg /tmp/cats-v-dogs/training/dogs/dog.641.jpg  
/tmp/PetImages/Dog/dog.2331.jpg /tmp/cats-v-dogs/training/dogs/dog.2331.jpg  
/tmp/PetImages/Dog/dog.166.jpg /tmp/cats-v-dogs/training/dogs/dog.166.jpg  
/tmp/PetImages/Dog/dog.2249.jpg /tmp/cats-v-dogs/training/dogs/dog.2249.jpg  
/tmp/PetImages/Dog/dog.2400.jpg /tmp/cats-v-dogs/training/dogs/dog.2400.jpg  
/tmp/PetImages/Dog/dog.517.jpg /tmp/cats-v-dogs/training/dogs/dog.517.jpg  
/tmp/PetImages/Dog/dog.2150.jpg /tmp/cats-v-dogs/training/dogs/dog.2150.jpg  
/tmp/PetImages/Dog/dog.2458.jpg /tmp/cats-v-dogs/training/dogs/dog.2458.jpg  
/tmp/PetImages/Dog/dog.634.jpg /tmp/cats-v-dogs/training/dogs/dog.634.jpg  
/tmp/PetImages/Dog/dog.439.jpg /tmp/cats-v-dogs/training/dogs/dog.439.jpg  
/tmp/PetImages/Dog/dog.2388.jpg /tmp/cats-v-dogs/training/dogs/dog.2388.jpg  
/tmp/PetImages/Dog/dog.560.jpg /tmp/cats-v-dogs/training/dogs/dog.560.jpg  
/tmp/PetImages/Dog/dog.2309.jpg /tmp/cats-v-dogs/training/dogs/dog.2309.jpg  
/tmp/PetImages/Dog/dog.2110.jpg /tmp/cats-v-dogs/training/dogs/dog.2110.jpg  
/tmp/PetImages/Dog/dog.226.jpg /tmp/cats-v-dogs/training/dogs/dog.226.jpg  
/tmp/PetImages/Dog/dog.656.jpg /tmp/cats-v-dogs/training/dogs/dog.656.jpg  
/tmp/PetImages/Dog/dog.927.jpg /tmp/cats-v-dogs/training/dogs/dog.927.jpg  
/tmp/PetImages/Dog/dog.2155.jpg /tmp/cats-v-dogs/training/dogs/dog.2155.jpg  
/tmp/PetImages/Dog/dog.930.jpg /tmp/cats-v-dogs/training/dogs/dog.930.jpg  
/tmp/PetImages/Dog/dog.903.jpg /tmp/cats-v-dogs/training/dogs/dog.903.jpg  
/tmp/PetImages/Dog/dog.2373.jpg /tmp/cats-v-dogs/training/dogs/dog.2373.jpg  
/tmp/PetImages/Dog/dog.489.jpg /tmp/cats-v-dogs/training/dogs/dog.489.jpg  
/tmp/PetImages/Dog/dog.304.jpg /tmp/cats-v-dogs/training/dogs/dog.304.jpg  
/tmp/PetImages/Dog/dog.399.jpg /tmp/cats-v-dogs/training/dogs/dog.399.jpg  
/tmp/PetImages/Dog/dog.316.jpg /tmp/cats-v-dogs/training/dogs/dog.316.jpg  
/tmp/PetImages/Dog/dog.474.jpg /tmp/cats-v-dogs/training/dogs/dog.474.jpg  
/tmp/PetImages/Dog/dog.995.jpg /tmp/cats-v-dogs/training/dogs/dog.995.jpg  
/tmp/PetImages/Dog/dog.125.jpg /tmp/cats-v-dogs/training/dogs/dog.125.jpg  
/tmp/PetImages/Dog/dog.101.jpg /tmp/cats-v-dogs/training/dogs/dog.101.jpg  
/tmp/PetImages/Dog/dog.2430.jpg /tmp/cats-v-dogs/training/dogs/dog.2430.jpg  
/tmp/PetImages/Dog/dog.849.jpg /tmp/cats-v-dogs/training/dogs/dog.849.jpg  
/tmp/PetImages/Dog/dog.45.jpg /tmp/cats-v-dogs/training/dogs/dog.45.jpg  
/tmp/PetImages/Dog/dog.541.jpg /tmp/cats-v-dogs/training/dogs/dog.541.jpg  
/tmp/PetImages/Dog/dog.229.jpg /tmp/cats-v-dogs/training/dogs/dog.229.jpg  
/tmp/PetImages/Dog/dog.63.jpg /tmp/cats-v-dogs/training/dogs/dog.63.jpg  
/tmp/PetImages/Dog/dog.990.jpg /tmp/cats-v-dogs/training/dogs/dog.990.jpg  
/tmp/PetImages/Dog/dog.498.jpg /tmp/cats-v-dogs/training/dogs/dog.498.jpg  
/tmp/PetImages/Dog/dog.889.jpg /tmp/cats-v-dogs/training/dogs/dog.889.jpg  
/tmp/PetImages/Dog/dog.452.jpg /tmp/cats-v-dogs/training/dogs/dog.452.jpg  
/tmp/PetImages/Dog/dog.787.jpg /tmp/cats-v-dogs/training/dogs/dog.787.jpg  
/tmp/PetImages/Dog/dog.259.jpg /tmp/cats-v-dogs/training/dogs/dog.259.jpg  
/tmp/PetImages/Dog/dog.245.jpg /tmp/cats-v-dogs/training/dogs/dog.245.jpg  
/tmp/PetImages/Dog/dog.682.jpg /tmp/cats-v-dogs/training/dogs/dog.682.jpg  
/tmp/PetImages/Dog/dog.2177.jpg /tmp/cats-v-dogs/training/dogs/dog.2177.jpg  
/tmp/PetImages/Dog/dog.139.jpg /tmp/cats-v-dogs/training/dogs/dog.139.jpg  
/tmp/PetImages/Dog/dog.420.jpg /tmp/cats-v-dogs/training/dogs/dog.420.jpg  
/tmp/PetImages/Dog/dog.894.jpg /tmp/cats-v-dogs/training/dogs/dog.894.jpg  
/tmp/PetImages/Dog/dog.895.jpg /tmp/cats-v-dogs/training/dogs/dog.895.jpg

[illegible]

[illegible]

[illegible]

/tmp/PetImages/Dog/dog.2300.jpg /tmp/cats-v-dogs/training/dogs/dog.2300.jpg  
/tmp/PetImages/Dog/dog.20.jpg /tmp/cats-v-dogs/training/dogs/dog.20.jpg  
/tmp/PetImages/Dog/dog.317.jpg /tmp/cats-v-dogs/training/dogs/dog.317.jpg  
/tmp/PetImages/Dog/dog.2012.jpg /tmp/cats-v-dogs/training/dogs/dog.2012.jpg  
/tmp/PetImages/Dog/dog.753.jpg /tmp/cats-v-dogs/training/dogs/dog.753.jpg  
/tmp/PetImages/Dog/dog.270.jpg /tmp/cats-v-dogs/training/dogs/dog.270.jpg  
/tmp/PetImages/Dog/dog.999.jpg /tmp/cats-v-dogs/training/dogs/dog.999.jpg  
/tmp/PetImages/Dog/dog.271.jpg /tmp/cats-v-dogs/training/dogs/dog.271.jpg  
/tmp/PetImages/Dog/dog.2078.jpg /tmp/cats-v-dogs/training/dogs/dog.2078.jpg  
/tmp/PetImages/Dog/dog.95.jpg /tmp/cats-v-dogs/training/dogs/dog.95.jpg  
/tmp/PetImages/Dog/dog.211.jpg /tmp/cats-v-dogs/training/dogs/dog.211.jpg  
/tmp/PetImages/Dog/dog.2464.jpg /tmp/cats-v-dogs/training/dogs/dog.2464.jpg  
/tmp/PetImages/Dog/dog.2222.jpg /tmp/cats-v-dogs/training/dogs/dog.2222.jpg  
/tmp/PetImages/Dog/dog.831.jpg /tmp/cats-v-dogs/training/dogs/dog.831.jpg  
/tmp/PetImages/Dog/dog.2475.jpg /tmp/cats-v-dogs/training/dogs/dog.2475.jpg  
/tmp/PetImages/Dog/dog.444.jpg /tmp/cats-v-dogs/training/dogs/dog.444.jpg  
/tmp/PetImages/Dog/dog.26.jpg /tmp/cats-v-dogs/training/dogs/dog.26.jpg  
/tmp/PetImages/Dog/dog.74.jpg /tmp/cats-v-dogs/training/dogs/dog.74.jpg  
/tmp/PetImages/Dog/dog.862.jpg /tmp/cats-v-dogs/training/dogs/dog.862.jpg  
/tmp/PetImages/Dog/dog.369.jpg /tmp/cats-v-dogs/training/dogs/dog.369.jpg  
/tmp/PetImages/Dog/dog.2285.jpg /tmp/cats-v-dogs/training/dogs/dog.2285.jpg  
/tmp/PetImages/Dog/dog.569.jpg /tmp/cats-v-dogs/training/dogs/dog.569.jpg  
/tmp/PetImages/Dog/dog.838.jpg /tmp/cats-v-dogs/training/dogs/dog.838.jpg  
/tmp/PetImages/Dog/dog.2130.jpg /tmp/cats-v-dogs/training/dogs/dog.2130.jpg  
/tmp/PetImages/Dog/dog.2290.jpg /tmp/cats-v-dogs/training/dogs/dog.2290.jpg  
/tmp/PetImages/Dog/dog.2038.jpg /tmp/cats-v-dogs/training/dogs/dog.2038.jpg  
/tmp/PetImages/Dog/dog.2072.jpg /tmp/cats-v-dogs/training/dogs/dog.2072.jpg  
/tmp/PetImages/Dog/dog.770.jpg /tmp/cats-v-dogs/training/dogs/dog.770.jpg  
/tmp/PetImages/Dog/dog.62.jpg /tmp/cats-v-dogs/training/dogs/dog.62.jpg  
/tmp/PetImages/Dog/dog.24.jpg /tmp/cats-v-dogs/training/dogs/dog.24.jpg  
/tmp/PetImages/Dog/dog.2439.jpg /tmp/cats-v-dogs/training/dogs/dog.2439.jpg  
/tmp/PetImages/Dog/dog.78.jpg /tmp/cats-v-dogs/training/dogs/dog.78.jpg  
/tmp/PetImages/Dog/dog.618.jpg /tmp/cats-v-dogs/training/dogs/dog.618.jpg  
/tmp/PetImages/Dog/dog.673.jpg /tmp/cats-v-dogs/training/dogs/dog.673.jpg  
/tmp/PetImages/Dog/dog.582.jpg /tmp/cats-v-dogs/training/dogs/dog.582.jpg  
/tmp/PetImages/Dog/dog.740.jpg /tmp/cats-v-dogs/training/dogs/dog.740.jpg  
/tmp/PetImages/Dog/dog.835.jpg /tmp/cats-v-dogs/training/dogs/dog.835.jpg  
/tmp/PetImages/Dog/dog.303.jpg /tmp/cats-v-dogs/training/dogs/dog.303.jpg  
/tmp/PetImages/Dog/dog.2356.jpg /tmp/cats-v-dogs/training/dogs/dog.2356.jpg  
/tmp/PetImages/Dog/dog.521.jpg /tmp/cats-v-dogs/training/dogs/dog.521.jpg  
/tmp/PetImages/Dog/dog.2319.jpg /tmp/cats-v-dogs/training/dogs/dog.2319.jpg  
/tmp/PetImages/Dog/dog.459.jpg /tmp/cats-v-dogs/training/dogs/dog.459.jpg  
/tmp/PetImages/Dog/dog.2169.jpg /tmp/cats-v-dogs/training/dogs/dog.2169.jpg  
/tmp/PetImages/Dog/dog.868.jpg /tmp/cats-v-dogs/training/dogs/dog.868.jpg  
/tmp/PetImages/Dog/dog.2437.jpg /tmp/cats-v-dogs/training/dogs/dog.2437.jpg  
/tmp/PetImages/Dog/dog.918.jpg /tmp/cats-v-dogs/training/dogs/dog.918.jpg  
/tmp/PetImages/Dog/dog.485.jpg /tmp/cats-v-dogs/training/dogs/dog.485.jpg  
/tmp/PetImages/Dog/dog.513.jpg /tmp/cats-v-dogs/training/dogs/dog.513.jpg  
/tmp/PetImages/Dog/dog.2034.jpg /tmp/cats-v-dogs/training/dogs/dog.2034.jpg  
/tmp/PetImages/Dog/dog.2092.jpg /tmp/cats-v-dogs/training/dogs/dog.2092.jpg  
/tmp/PetImages/Dog/dog.470.jpg /tmp/cats-v-dogs/training/dogs/dog.470.jpg  
/tmp/PetImages/Dog/dog.294.jpg /tmp/cats-v-dogs/training/dogs/dog.294.jpg  
/tmp/PetImages/Dog/dog.2417.jpg /tmp/cats-v-dogs/training/dogs/dog.2417.jpg  
/tmp/PetImages/Dog/dog.539.jpg /tmp/cats-v-dogs/training/dogs/dog.539.jpg  
/tmp/PetImages/Dog/dog.2197.jpg /tmp/cats-v-dogs/training/dogs/dog.2197.jpg  
/tmp/PetImages/Dog/dog.142.jpg /tmp/cats-v-dogs/training/dogs/dog.142.jpg  
/tmp/PetImages/Dog/dog.2159.jpg /tmp/cats-v-dogs/training/dogs/dog.2159.jpg  
/tmp/PetImages/Dog/dog.79.jpg /tmp/cats-v-dogs/training/dogs/dog.79.jpg  
/tmp/PetImages/Dog/dog.2251.jpg /tmp/cats-v-dogs/training/dogs/dog.2251.jpg  
/tmp/PetImages/Dog/dog.2114.jpg /tmp/cats-v-dogs/training/dogs/dog.2114.jpg  
/tmp/PetImages/Dog/dog.626.jpg /tmp/cats-v-dogs/training/dogs/dog.626.jpg  
/tmp/PetImages/Dog/dog.2409.jpg /tmp/cats-v-dogs/training/dogs/dog.2409.jpg  
/tmp/PetImages/Dog/dog.2329.jpg /tmp/cats-v-dogs/training/dogs/dog.2329.jpg  
/tmp/PetImages/Dog/dog.551.jpg /tmp/cats-v-dogs/training/dogs/dog.551.jpg  
/tmp/PetImages/Dog/dog.2104.jpg /tmp/cats-v-dogs/training/dogs/dog.2104.jpg  
/tmp/PetImages/Dog/dog.2363.jpg /tmp/cats-v-dogs/training/dogs/dog.2363.jpg  
/tmp/PetImages/Dog/dog.593.jpg /tmp/cats-v-dogs/training/dogs/dog.593.jpg  
/tmp/PetImages/Dog/dog.2429.jpg /tmp/cats-v-dogs/training/dogs/dog.2429.jpg  
/tmp/PetImages/Dog/dog.307.jpg /tmp/cats-v-dogs/training/dogs/dog.307.jpg  
/tmp/PetImages/Dog/dog.2223.jpg /tmp/cats-v-dogs/training/dogs/dog.2223.jpg  
/tmp/PetImages/Dog/dog.620.jpg /tmp/cats-v-dogs/training/dogs/dog.620.jpg  
/tmp/PetImages/Dog/dog.80.jpg /tmp/cats-v-dogs/training/dogs/dog.80.jpg  
/tmp/PetImages/Dog/dog.2403.jpg /tmp/cats-v-dogs/training/dogs/dog.2403.jpg  
/tmp/PetImages/Dog/dog.104.jpg /tmp/cats-v-dogs/training/dogs/dog.104.jpg  
/tmp/PetImages/Dog/dog.2259.jpg /tmp/cats-v-dogs/training/dogs/dog.2259.jpg  
/tmp/PetImages/Dog/dog.196.jpg /tmp/cats-v-dogs/training/dogs/dog.196.jpg  
/tmp/PetImages/Dog/dog.694.jpg /tmp/cats-v-dogs/training/dogs/dog.694.jpg  
/tmp/PetImages/Dog/dog.607.jpg /tmp/cats-v-dogs/training/dogs/dog.607.jpg

[illegible]



[illegible]

[illegible]

/tmp/PetImages/Dog/dog.2005.jpg /tmp/cats-v-dogs/training/dogs/dog.2005.jpg  
/tmp/PetImages/Dog/dog.327.jpg /tmp/cats-v-dogs/training/dogs/dog.327.jpg  
/tmp/PetImages/Dog/dog.88.jpg /tmp/cats-v-dogs/training/dogs/dog.88.jpg  
/tmp/PetImages/Dog/dog.805.jpg /tmp/cats-v-dogs/training/dogs/dog.805.jpg  
/tmp/PetImages/Dog/dog.243.jpg /tmp/cats-v-dogs/training/dogs/dog.243.jpg  
/tmp/PetImages/Dog/dog.2079.jpg /tmp/cats-v-dogs/training/dogs/dog.2079.jpg  
/tmp/PetImages/Dog/dog.2045.jpg /tmp/cats-v-dogs/training/dogs/dog.2045.jpg  
/tmp/PetImages/Dog/dog.162.jpg /tmp/cats-v-dogs/training/dogs/dog.162.jpg  
/tmp/PetImages/Dog/dog.267.jpg /tmp/cats-v-dogs/training/dogs/dog.267.jpg  
/tmp/PetImages/Dog/dog.677.jpg /tmp/cats-v-dogs/training/dogs/dog.677.jpg  
/tmp/PetImages/Dog/dog.2479.jpg /tmp/cats-v-dogs/training/dogs/dog.2479.jpg  
/tmp/PetImages/Dog/dog.2025.jpg /tmp/cats-v-dogs/training/dogs/dog.2025.jpg  
/tmp/PetImages/Dog/dog.2064.jpg /tmp/cats-v-dogs/training/dogs/dog.2064.jpg  
/tmp/PetImages/Dog/dog.338.jpg /tmp/cats-v-dogs/training/dogs/dog.338.jpg  
/tmp/PetImages/Dog/dog.298.jpg /tmp/cats-v-dogs/training/dogs/dog.298.jpg  
/tmp/PetImages/Dog/dog.622.jpg /tmp/cats-v-dogs/training/dogs/dog.622.jpg  
/tmp/PetImages/Dog/dog.135.jpg /tmp/cats-v-dogs/training/dogs/dog.135.jpg  
/tmp/PetImages/Dog/dog.266.jpg /tmp/cats-v-dogs/training/dogs/dog.266.jpg  
/tmp/PetImages/Dog/dog.2039.jpg /tmp/cats-v-dogs/training/dogs/dog.2039.jpg  
/tmp/PetImages/Dog/dog.82.jpg /tmp/cats-v-dogs/training/dogs/dog.82.jpg  
/tmp/PetImages/Dog/dog.2224.jpg /tmp/cats-v-dogs/training/dogs/dog.2224.jpg  
/tmp/PetImages/Dog/dog.578.jpg /tmp/cats-v-dogs/training/dogs/dog.578.jpg  
/tmp/PetImages/Dog/dog.42.jpg /tmp/cats-v-dogs/training/dogs/dog.42.jpg  
/tmp/PetImages/Dog/dog.423.jpg /tmp/cats-v-dogs/training/dogs/dog.423.jpg  
/tmp/PetImages/Dog/dog.244.jpg /tmp/cats-v-dogs/training/dogs/dog.244.jpg  
/tmp/PetImages/Dog/dog.2376.jpg /tmp/cats-v-dogs/training/dogs/dog.2376.jpg  
/tmp/PetImages/Dog/dog.279.jpg /tmp/cats-v-dogs/training/dogs/dog.279.jpg  
/tmp/PetImages/Dog/dog.312.jpg /tmp/cats-v-dogs/training/dogs/dog.312.jpg  
/tmp/PetImages/Dog/dog.2313.jpg /tmp/cats-v-dogs/training/dogs/dog.2313.jpg  
/tmp/PetImages/Dog/dog.230.jpg /tmp/cats-v-dogs/training/dogs/dog.230.jpg  
/tmp/PetImages/Dog/dog.2406.jpg /tmp/cats-v-dogs/training/dogs/dog.2406.jpg  
/tmp/PetImages/Dog/dog.952.jpg /tmp/cats-v-dogs/training/dogs/dog.952.jpg  
/tmp/PetImages/Dog/dog.32.jpg /tmp/cats-v-dogs/training/dogs/dog.32.jpg  
/tmp/PetImages/Dog/dog.630.jpg /tmp/cats-v-dogs/training/dogs/dog.630.jpg  
/tmp/PetImages/Dog/dog.179.jpg /tmp/cats-v-dogs/training/dogs/dog.179.jpg  
/tmp/PetImages/Dog/dog.171.jpg /tmp/cats-v-dogs/training/dogs/dog.171.jpg  
/tmp/PetImages/Dog/dog.2103.jpg /tmp/cats-v-dogs/training/dogs/dog.2103.jpg  
/tmp/PetImages/Dog/dog.2297.jpg /tmp/cats-v-dogs/training/dogs/dog.2297.jpg  
/tmp/PetImages/Dog/dog.192.jpg /tmp/cats-v-dogs/training/dogs/dog.192.jpg  
/tmp/PetImages/Dog/dog.199.jpg /tmp/cats-v-dogs/training/dogs/dog.199.jpg  
/tmp/PetImages/Dog/dog.652.jpg /tmp/cats-v-dogs/training/dogs/dog.652.jpg  
/tmp/PetImages/Dog/dog.75.jpg /tmp/cats-v-dogs/training/dogs/dog.75.jpg  
/tmp/PetImages/Dog/dog.495.jpg /tmp/cats-v-dogs/training/dogs/dog.495.jpg  
/tmp/PetImages/Dog/dog.728.jpg /tmp/cats-v-dogs/training/dogs/dog.728.jpg  
/tmp/PetImages/Dog/dog.680.jpg /tmp/cats-v-dogs/training/dogs/dog.680.jpg  
/tmp/PetImages/Dog/dog.2425.jpg /tmp/cats-v-dogs/training/dogs/dog.2425.jpg  
/tmp/PetImages/Dog/dog.347.jpg /tmp/cats-v-dogs/training/dogs/dog.347.jpg  
/tmp/PetImages/Dog/dog.2378.jpg /tmp/cats-v-dogs/training/dogs/dog.2378.jpg  
/tmp/PetImages/Dog/dog.923.jpg /tmp/cats-v-dogs/training/dogs/dog.923.jpg  
/tmp/PetImages/Dog/dog.2062.jpg /tmp/cats-v-dogs/training/dogs/dog.2062.jpg  
/tmp/PetImages/Dog/dog.2471.jpg /tmp/cats-v-dogs/training/dogs/dog.2471.jpg  
/tmp/PetImages/Dog/dog.66.jpg /tmp/cats-v-dogs/training/dogs/dog.66.jpg  
/tmp/PetImages/Dog/dog.606.jpg /tmp/cats-v-dogs/training/dogs/dog.606.jpg  
/tmp/PetImages/Dog/dog.705.jpg /tmp/cats-v-dogs/training/dogs/dog.705.jpg  
/tmp/PetImages/Dog/dog.408.jpg /tmp/cats-v-dogs/training/dogs/dog.408.jpg  
/tmp/PetImages/Dog/dog.546.jpg /tmp/cats-v-dogs/training/dogs/dog.546.jpg  
/tmp/PetImages/Dog/dog.111.jpg /tmp/cats-v-dogs/training/dogs/dog.111.jpg  
/tmp/PetImages/Dog/dog.2424.jpg /tmp/cats-v-dogs/training/dogs/dog.2424.jpg  
/tmp/PetImages/Dog/dog.815.jpg /tmp/cats-v-dogs/training/dogs/dog.815.jpg  
/tmp/PetImages/Dog/dog.55.jpg /tmp/cats-v-dogs/training/dogs/dog.55.jpg  
/tmp/PetImages/Dog/dog.164.jpg /tmp/cats-v-dogs/training/dogs/dog.164.jpg  
/tmp/PetImages/Dog/dog.2253.jpg /tmp/cats-v-dogs/training/dogs/dog.2253.jpg  
/tmp/PetImages/Dog/dog.287.jpg /tmp/cats-v-dogs/training/dogs/dog.287.jpg  
/tmp/PetImages/Dog/dog.2273.jpg /tmp/cats-v-dogs/training/dogs/dog.2273.jpg  
/tmp/PetImages/Dog/dog.2268.jpg /tmp/cats-v-dogs/training/dogs/dog.2268.jpg  
/tmp/PetImages/Dog/dog.352.jpg /tmp/cats-v-dogs/training/dogs/dog.352.jpg  
/tmp/PetImages/Dog/dog.2398.jpg /tmp/cats-v-dogs/training/dogs/dog.2398.jpg  
/tmp/PetImages/Dog/dog.2199.jpg /tmp/cats-v-dogs/training/dogs/dog.2199.jpg  
/tmp/PetImages/Dog/dog.2227.jpg /tmp/cats-v-dogs/training/dogs/dog.2227.jpg  
/tmp/PetImages/Dog/dog.2211.jpg /tmp/cats-v-dogs/training/dogs/dog.2211.jpg  
/tmp/PetImages/Dog/dog.600.jpg /tmp/cats-v-dogs/training/dogs/dog.600.jpg  
/tmp/PetImages/Dog/dog.822.jpg /tmp/cats-v-dogs/training/dogs/dog.822.jpg  
/tmp/PetImages/Dog/dog.2368.jpg /tmp/cats-v-dogs/training/dogs/dog.2368.jpg  
/tmp/PetImages/Dog/dog.381.jpg /tmp/cats-v-dogs/training/dogs/dog.381.jpg  
/tmp/PetImages/Dog/dog.360.jpg /tmp/cats-v-dogs/training/dogs/dog.360.jpg  
/tmp/PetImages/Dog/dog.429.jpg /tmp/cats-v-dogs/training/dogs/dog.429.jpg  
/tmp/PetImages/Dog/dog.2107.jpg /tmp/cats-v-dogs/training/dogs/dog.2107.jpg

[illegible]

[illegible]

/tmp/PetImages/Dog/dog.234.jpg /tmp/cats-v-dogs/training/dogs/dog.234.jpg

In [6]:

```
print(len(os.listdir('/tmp/cats-v-dogs/training/cats/')))
print(len(os.listdir('/tmp/cats-v-dogs/training/dogs/')))
print(len(os.listdir('/tmp/cats-v-dogs/testing/cats/')))
print(len(os.listdir('/tmp/cats-v-dogs/testing/dogs/')))
```

*# Expected output:*

```
# 1350
# 1350
# 150
# 150
```

```
1350
1350
150
150
```

In [7]:

```
# DEFINE A KERAS MODEL TO CLASSIFY CATS V DOGS
# USE AT LEAST 3 CONVOLUTION LAYERS
```

```
model = tf.keras.models.Sequential([
    tf.keras.layers.Conv2D(32, (3,3), activation='relu', input_shape=(150,150,3)),
    tf.keras.layers.MaxPooling2D(2,2),
    tf.keras.layers.Conv2D(32, (3,3), activation='relu'),
    tf.keras.layers.MaxPooling2D(2,2),
    tf.keras.layers.Conv2D(64, (3,3), activation='relu'),
    tf.keras.layers.MaxPooling2D(2,2),
    tf.keras.layers.Flatten(),
    tf.keras.layers.Dense(256, activation='relu'),
    tf.keras.layers.Dense(1, activation='sigmoid')
])

model.compile(optimizer=RMSprop(lr=0.001), loss='binary_crossentropy', metrics=['acc'])
```

## NOTE:

In the cell below you **MUST** use a batch size of 10 ( `batch_size=10` ) for the `train_generator` and the `validation_generator` . Using a batch size greater than 10 will exceed memory limits on the Coursera platform.

In [8]:

```
TRAINING_DIR = '/tmp/cats-v-dogs/training'
train_datagen = ImageDataGenerator(
    rescale=1./255,
    rotation_range=40,
    width_shift_range=0.2,
    height_shift_range=0.2,
    shear_range=0.2,
    zoom_range=0.2,
    horizontal_flip=True,
    fill_mode='nearest')

# NOTE: YOU MUST USE A BATCH SIZE OF 10 (batch_size=10) FOR THE
# TRAIN GENERATOR.
train_generator = train_datagen.flow_from_directory(
    TRAINING_DIR,
    target_size=(150, 150),
    batch_size=10,
    class_mode='binary')

VALIDATION_DIR = '/tmp/cats-v-dogs/testing'
validation_datagen = ImageDataGenerator(
    rescale=1./255,
    rotation_range=40,
    width_shift_range=0.2,
    height_shift_range=0.2,
    shear_range=0.2,
```

```

        zoom_range=0.2,
        horizontal_flip=True,
        fill_mode='nearest')

# NOTE: YOU MUST USE A BATCH SIZE OF 10 (batch_size=10) FOR THE
# VALIDATION GENERATOR.
validation_generator = validation_datagen.flow_from_directory(
    VALIDATION_DIR,
    target_size=(150, 150),
    batch_size=10,
    class_mode='binary')

# Expected Output:
# Found 2700 images belonging to 2 classes.
# Found 300 images belonging to 2 classes.

```

Found 2700 images belonging to 2 classes.  
Found 300 images belonging to 2 classes.

In [9]:

```

history = model.fit_generator(train_generator,
                             epochs=3,
                             verbose=1,
                             validation_data=validation_generator)

```

```

Epoch 1/3
270/270 [=====] - 96s 355ms/step - loss: 0.7075 - acc: 0.5730 - val_loss:
0.6813 - val_acc: 0.6100
Epoch 2/3
270/270 [=====] - 77s 287ms/step - loss: 0.6905 - acc: 0.6070 - val_loss:
0.6831 - val_acc: 0.5700
Epoch 3/3
270/270 [=====] - 81s 299ms/step - loss: 0.6597 - acc: 0.6256 - val_loss:
0.6663 - val_acc: 0.5800

```

In [10]:

```

# PLOT LOSS AND ACCURACY
%matplotlib inline

import matplotlib.image as mping
import matplotlib.pyplot as plt

#-----
# Retrieve a list of list results on training and test data
# sets for each training epoch
#-----
acc=history.history['acc']
val_acc=history.history['val_acc']
loss=history.history['loss']
val_loss=history.history['val_loss']

epochs=range(len(acc)) # Get number of epochs

#-----
# Plot training and validation accuracy per epoch
#-----
plt.plot(epochs, acc, 'r', "Training Accuracy")
plt.plot(epochs, val_acc, 'b', "Validation Accuracy")
plt.title('Training and validation accuracy')
plt.figure()

#-----
# Plot training and validation loss per epoch
#-----
plt.plot(epochs, loss, 'r', "Training Loss")
plt.plot(epochs, val_loss, 'b', "Validation Loss")

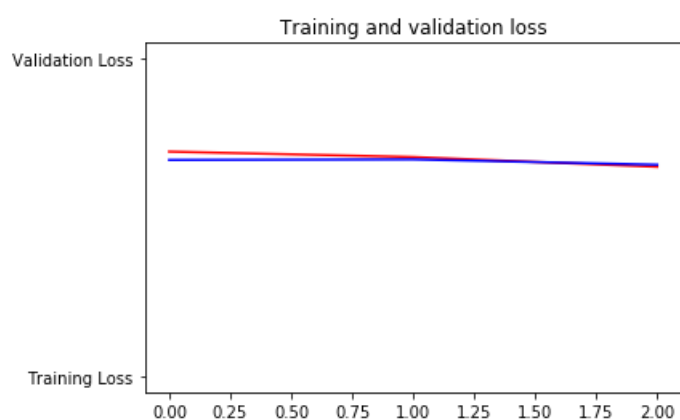
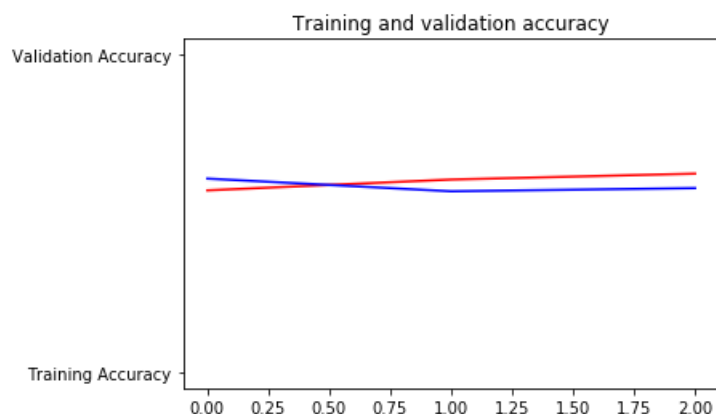
plt.title('Training and validation loss')

```

```
# Desired output. Charts with training and validation metrics. No crash :)
```

Out[10]:

Text(0.5, 1.0, 'Training and validation loss')



## Submission Instructions

In [ ]:

```
# Now click the 'Submit Assignment' button above.
```

**When you're done or would like to take a break, please run the two cells below to save your work and close the Notebook. This will free up resources for your fellow learners.**

In [ ]:

```
%%javascript
<!-- Save the notebook -->
IPython.notebook.save_checkpoint();
```

In [ ]:

```
%%javascript
IPython.notebook.session.delete();
window.onbeforeunload = null
setTimeout(function() { window.close(); }, 1000);
```