In [1]:

```
import os
import tensorflow as tf
import sys
import glob
import pickle
```

In [2]:

```
folder = "test"
image_path = "/Users/mingjuhe/Desktop/CPE646-Finalprject"
```

In [3]:

```
path = os.path.join(image_path,folder,'*g')
full_path = glob.glob(path)
```

In [4]:

```
full_path
```

Out[4]:

```
['/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat1.jpg',
 '/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat10.jpg',
 '/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat100.jpg',
 '/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat11.jpg',
 '/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat12.jpg',
 '/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat13.jpg',
 '/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat14.jpg',
 '/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat15.jpg',
 '/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat16.jpg',
 '/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat17.jpg',
 '/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat18.jpg',
 '/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat19.jpg',
 '/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat2.jpg',
 '/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat20.jpg',
 '/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat21.jpg',
 '/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat22.jpg',
 '/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat23.jpg',
 '/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat24.jpg',
```

In [5]:

```
len(full_path)
```

Out[5]:

```
300
```

In [6]:

```
with tf.gfile.FastGFile("/tmp/Final/output_graph.pb", 'rb') as g:
            graph_def2 = tf.GraphDef()
            graph_def2.ParseFromString(g.read())
            _ = tf.import_graph_def(graph_def2, name='')
```

In [7]:

```
pred_Dog_cat = []
for i in full_path:

    image_data = tf.gfile.FastGFile(i, 'rb').read()
    label_lines = [line.rstrip() for line in tf.gfile.GFile("/Users/mingjuhe/Desktop

    with tf.Session() as sess:
        softmax_tensor = sess.graph.get_tensor_by_name('final_result:0')
        predictions = sess.run(softmax_tensor, {'DecodeJpeg/contents:0': image_data}
        pred_Dog_cat.append(predictions)
        top_k = predictions[0].argsort()[-len(predictions[0]):][::-1]
        print(i)
        for node_id in top_k:
            human_string = label_lines[node_id]
            score = predictions[0][node_id]
            print('%s (score = %.5f)' % (human_string, score))

            filename = "result.txt"
            with open(filename, 'a+') as g:
                g.write('\n**%s**\n' % (i))
                for node_id in top_k:
                    human_string = label_lines[node_id]
                    score = predictions[0][node_id]
                    g.write(i)
                    g.write('%s (score = %.5f)\n\n' % (human_string, score))
```

```
/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat1.jpg
Cat (score = 0.99848)
Dog (score = 0.00387)
/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat10.jpg
Cat (score = 0.98958)
Dog (score = 0.30992)
/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat100.jpg
Cat (score = 0.99958)
Dog (score = 0.01146)
/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat11.jpg
Cat (score = 0.98550)
Dog (score = 0.06604)
/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat12.jpg
Cat (score = 0.99844)
Dog (score = 0.01270)
/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat13.jpg
Cat (score = 0.86974)
Dog (score = 0.08597)
/Users/mingjuhe/Desktop/CPE646-Finalprject/test/Cat14.jpg
```

In [ ]:

In [ ]:

```
```