7. Acquiring New Images version 2

In addtion to previous external German traffic signs, adding the same sign that predicted correctly earlier with addtional changes, we discover that:

- 1. It is difficult for classifier to recognized a sign with graffiti on it (two tapes across the image)
- 2. It failed to recognize the image when the sign is rotate around 30 degree. Human can still recognize it.
- 3. Human can recognize the mirror image of the sign but the classifier couldnot
- 4. Predicted that it will also fail on different level of brightness, contrast, glares... with many experiment, this classifier handle these situations very well

```
In [2]: ext_image_list1 = []
    ext_image_list1 = build_external_traffic_sign (ext_image_list1)
```



In [3]: trained_model_file = "./LenetTrafficSign_Lenet2_8" #saver.restore(sess,tf.train.latest_checkpoint('./'))
perform_prediction (trained_model_file, ext_image_list1)

expected/predicted class: 4/35 expected/predicted class: 25/25 expected/predicted class: 25/25 expected/predicted class: 25/11 expected/predicted class: 25/25 expected/predicted class: 25/1 expected/predicted class: 25/18 expected/predicted class: 25/25 correct: 4