# Deep features for image retrieval

TOTAL POINTS 7

1.  What's the least common category in the training data?                    `1 point`

    ● **bird**

    ○ **dog**

    ○ **cat**

    ○ **automobile**

2.  Of the images below, which is the nearest 'cat' labeled image in the training data to the the first image in     `1 point`
    the test data (image_test[0:1])?

    ○
    

    ○
    

    ○
    

    ○
    

    ○
    

    ●
    

3.  Of the images below, which is the nearest 'dog' labeled image in the training data to the the first image in     `1 point`
    the test data (image_test[0:1])?

    ○
    

    ○
    

    ○
    

    ●
    

    ○
    

    ○

4. For the first image in the test data, in what range is the mean distance between this image and its 5 nearest neighbors that were labeled *'cat'* in the training data?
   **1 point**

   - ○ 33 to 35
   - ● 35 to 37
   - ○ 37 to 39
   - ○ 39 to 41
   - ○ Above 41

5. For the first image in the test data, in what range is the mean distance between this image and its 5 nearest neighbors that were labeled *'dog'* in the training data?
   **1 point**

   - ○ 33 to 35
   - ○ 35 to 37
   - ● 37 to 39
   - ○ 39 to 41
   - ○ Above 41

6. On average, is the first image in the test data closer to its 5 nearest neighbors in the *'cat'* data or in the *'dog'* data?
   **1 point**

   - ● cat
   - ○ dog

7. In what range is the accuracy of the 1-nearest neighbor classifier at classifying 'dog' images from the test set?
   **1 point**

   - ○ 50 to 60
   - ● 60 to 70
   - ○ 70 to 80
   - ○ 80 to 90
   - ○ 90 to 100

Save    Submit