**Fully Connected Layer Tests:**

This layer basically takes an input volume (whatever the output is of the conv or ReLU or pool layer preceding it) and outputs an N dimensional vector where N is the number of classes that the program has to choose from.

TEST(fully\_connected\_layer, test\_fully\_connected\_layer): for this test we have created this objects:

* Weights: object of an Image
* fully\_connected\_layer: object of Fully Connected Layer class
* inputImage: input image
* expectedOutput: expected output
* outputFrom\_Fully\_connected\_layer: output of the fully connected layer for the input image

after creating this objets and adding the data to each object we tested if the expected output is equals to the output of the connected layer with (ASSERT\_EQ)

**Max Pooling Layer:**

Its function is to progressively reduce the spatial size of the representation to reduce the amount of parameters and computation in the network, and hence to also control overfitting.

TEST(max\_pool\_layer, test\_max\_pool):

TEST(max\_pool\_layer2, test\_max\_pool2):

For each of these tests we created an input image, an expected output and an object of max pool layer. After adding the data for each object we tested with (ASSERT\_EQ) if the output of the max pool layer as we expect it in the output that we created.