C++ Frontend Tests

In this folder live the tests for PyTorch's C++ Frontend. They use the [GoogleTest](https://github.com/google/googletest) test framework.

CUDA Tests

To make a test runnable only on platforms with CUDA, you should suffix your test with `_CUDA`, e.g.

```
TEST(MyTestSuite, MyTestCase_CUDA) { }
```

To make it runnable only on platforms with at least two CUDA machines, suffix it with `_MultiCUDA` instead of `_CUDA`, e.g.

```
TEST(MyTestSuite, MyTestCase_MultiCUDA) { }
```

There is logic in `main.cpp` that detects the availability and number of CUDA devices and supplies the appropriate negative filters to GoogleTest.

Integration Tests

Integration tests use the MNIST dataset. You must download it by running the following command from the PyTorch root folder:

```
$ python tools/download_mnist.py -d test/cpp/api/mnist
```

The required paths will be referenced as `test/cpp/api/mnist/...` in the test code, so you *must* run the integration tests from the PyTorch root folder.