

- \_\_\_\_ 5. Call the OpenCL function to **Create** the `cl::Kernel` object from the **program** after the comment “Exercise 2 Step 2.5.”

*You can use the `kernel_name` variable in your argument which is set to “SimpleKernel” and should match your kernel name.*

- \_\_\_\_ 6. Call the function to setup the Kernel arguments four times, once for each buffer: **Buffer\_In**, **Buffer\_In2**, and **Buffer\_Out**, and another time to pass in the variable `vectorSize`. Do this after the comment “Exercise 2 Step 2.6.”

- \_\_\_\_ 7. After the comment “Exercise 2 Step 2.7,” **launch** the kernel using **enqueueTask**.

*Use the command queue we created in the first exercise.*

*This command will execute the kernel on the OpenCL device when you are not in emulation mode.*

- \_\_\_\_ 8. Following the comment “Exercise 2 Step 2.8,” read back the results of the kernel execution by copying the contents of the `Buffer_Out` buffer to the array **Z**.

*The contents of Z will be verified later in **main**.*

*Make sure the blocking argument of the call is set to `CL_TRUE`. This guarantees that after read function, Z will be ready to be used.*

- \_\_\_\_ 9. After the comment “Exercise 2 Step 2.9,” write the **same** math operation you have in the kernel. This time, however, it should operate on `X[i]` and `Y[i]` and store the result into `CalcZ[i]`.

*Here we’re doing the same calculation the kernel is doing, except that we’re using regular C++. The contents are then stored in `CalcZ`, which will be compared to the contents of Z.*

- \_\_\_\_ 10. Save **main.cpp**.