

cpp

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```
[1]: #pragma cling add_library_path("/home/jovinn/miniconda3/envs/xeus-cling/lib")
      #pragma cling load("libkokkoscore")

      #define HAVE_KOKKOS 1
      #define HAVE_THREADS 1

      #include "matar.h"

      using namespace mtr;
```

Let's create a function.

```
[2]: // KOKKOS_FUNCTION
      void expensive_func(int i)
      {
          // this will not run on the GPU
          std::cout << "Running thread " << i << std::endl;
          std::this_thread::sleep_for(std::chrono::seconds(1));
      }
```

```
[3]: Kokkos::initialize();
      {
          FOR_ALL(i, 0, 10, {
              // expensive_func(i);
              // this will not run on the GPU
              std::cout << "Running thread " << i << std::endl;
              std::this_thread::sleep_for(std::chrono::seconds(1));
          });
      }
      Kokkos::finalize();
```

```
Running thread 0
Running thread 1
Running thread 2
Running thread 3
Running thread 4
Running thread 5
Running thread 6
Running thread 7
```

Running thread 8
Running thread 9