

## Getting Started on OpenMP

Save the following C++ code in an appropriately named file (eg `omp_hello.cpp`).

```
#include <cstdlib>
#include <iostream>
#include <omp.h>

int main (int argc, char *argv[])
{
    #pragma omp parallel
    {
        const int tid = omp_get_thread_num();
        const int nthreads = omp_get_num_threads();
        const int num_proc = omp_get_num_procs();

        std::cout << "Hello␣from␣thread␣" << tid
                   << "␣/␣" << nthreads
                   << "␣:␣" << num_proc << std::endl;
    }
}
```

Compile your program and link to OpenMP libraries

```
g++ -fopenmp -o omp_hello omp_hello.cpp
```

Run your program

```
./omp_hello
```

### Exercises:

- Modify your program to produce cleaner output
- Modify your program to run with an arbitrary number of threads given as command line user input.