# Lab session 01

## Exercises

1. **[20p]** Compile and execute the code in the resources.
2. **[20p]** Display the number of cores available on the computer. Do this from the command line and from inside the C code.
   - **Hint: sysconf()**
3. **[10p]** Change the number of threads that are started by the program.
4. **[10p]** Modify the number of threads to be equal to the number of cores available on the computer. Make sure you do this automatically so that when you run your code on a different computer, the number of threads changes accordingly.
5. **[20p]** Modify the function called threadFunction so that the "Hello World" message is displayed 100 times along with the index of the current iteration. Does the output match your expectations? Explain.
6. **[20p]** Modify the program so that it runs two threads. Each thread will execute its own function.