

## OpenACC Programming

Instructions Marks: 10

Due date: 08:30 on 18th April 2018

By submitting your assignment via the RUConnected link, you declare that the assignment submitted is entirely your own work, unless noted otherwise.

## Aim

Using data management in OpenAcc to accelerate a simple Laplace solver

## **Tasks**

Modify the parallel code for the Laplace solver generated in Prac 1 to handle data transfers more efficiently, by inserting appropriate OpenACC data pragmas.

Supply timings (as a comment in your source code) for sequential execution of the program on a single core CPU and also for parallel execution on the GPU.

By way of another comment in your source code, given an explanation for the acceleration / deceleration you encountered when executing on the GPU.