

My solutions are on Github https://github.com/nikolajRoager/PracticalProgramming_exercises

Clone: `git clone https://github.com/nikolajRoager/PracticalProgramming_exercises.git`

My Student ID number ends with 75, so I have exam project number 6, as $6 + 23 \cdot 3 = 75$.

Please see the `readme.md` or `readme.pdf` files in the exam folder for details. Here is a quick breakdown of what I did

Part A (The given problem): **Build an interpolating routine which takes as the input the vectors $\{x_i\}$ and $\{y_j\}$, and the matrix $\{F_{i,j}\}$ and returns the bi-linear interpolated value of the function at a given 2D-point $p=(p_x, p_y)$.** Success, 6 points

Part B (An idea for an extension I had): **Implement bi-cubic interpolation.** Success, 3 points

Part C (An idea for an extension I had): **Implement N-linear interpolation for a grid with arbitrary dimension N .**, Success, 1 point

In total, 10 points.

In all exercises I have verified that all boundary conditions are satisfied within a relative and absolute precision of 10^{-5} , I have also plotted some demonstrative examples.