Guidelines for Report

Structure

- Titlepage: Name, Mat-Num., Title of Project, Course-Nr. (LV-Nr), Date
- Copy of assignment
- Mathematical Formulation
    - Governing equations
    - Non-dimensionalization of equations, non-dimensional characteristic parameters
- Numerical Solution
    - Computational domain
    - Grid (structure, staggered, non-staggered, boundary points)
    - Discretization in space
    - Discretization in time
    - Boundary conditions (for velocity components, pressure, temperature)
    - Solution procedure (e.g. segregated approach: projection + pressure correction
        - Pressure correction
        - Description of Solver for Poisson equation

- Results (as requested in assignment):
    - Contours of velocity, temperature fields
    - Profiles at selected positions
    - Rate of convergence shown by decrease of residuals

Important notes:

- keep always the same terminology: e.g. v_φ should not be termed sometimes as “azimuthal velocity”, other times as “circumferential velocity”
- use consistent symbols: each quantity is denoted always by the same symbol
- take care of correct indices, e.g., $u_i \neq u_j \neq u_J$

The report can be written in English or German.

The report is to be delivered together with the program.