PCB Session 1 Tasks

Task 1:

- Write a small report about voltage references and explain why we can't use them in place of voltage regulators.
- Mention the importance of reference designators, and what should we do if there's no place for them on the PCB.
- Bonus: write a report on gerber files.
- Bonus: write a report on copper pours and their importance and use cases.

Task 2

- Implement the schematic and PCB for the circuit in page 86 of the presentation, maximum board dimensions 20x20mm.
- Implement the schematic and PCB for a 5V voltage regulator circuit, maximum board dimensions 30x20mm
- Implement the schematic and PCB of a single channel motor driver using the L293D IC, maximum board dimensions 50x50mm. **Implementing a dual channel motor driver PCB is a bonus**.

Requirements:

For the above PCB tasks, use the following design rules:

- All clearance 0.6mm.
- Minimum trace width 0.6mm.
- Use a grid of 1 mm.

Deliverables:

- You are required to submit a compressed file containing the whole directory of your PCB projects, including library files, schematic and PCB documents. Also, submit PDF files of your reports.