For all following problems, unless otherwise noted, file names refer to classical domains from the classical planning domains repository of http://planning.domains available here: https://bitbucket.org/planning-researchers/classical-domains/src/master/classical/

- 1. **Elevator Domain:** Open the domain file elevators-00-strips/domain.pddl and briefly explain what each operator does. Then open elevators-00-strips/s2-4.pddl and find a plan that solves that problem.
- 2. Elevator Domain Extension: How would you have to change elevators-00-strips/domain.pddl to allow multiple elevators to serve customers?
- 3. Elevator Domain with ADL: Open elevators-00-adl/domain.pddl and explain the stop operator in detail. Note especially the differences with the strips-version of the domain.
- 4. **Airport Domain:** Open the domain file airport-adl/domain.pddl and briefly explain what each operator does (consult p01-airport1-p1.pddl for possible objects, and goals)
- 5. Airport Domain: Compare airport-adl/p02-airport1-p1.pddl and airport-adl/p03-airport1-p2.pddl. My planner can solve the former in a bit over 2s, while it needs over 23s for the latter. Explain what makes the second problem that much harder to solve.
- 6. **Domain Engineering:** Let's assume you can load and unload packages into airplanes. Write the PDDL operators that would need to be added to airport-adl/domain.pddl to model these actions, and explain which additional predicates and types you need.