1) Given the following ALC interpretation from the slides:

Add two more persons and two more courses, such that the result is still a model of the TBox from slide 12.

2) Add an ABox with 4 Individuals to the TBox on slide 12 and extend the model accordingly.

3) Design an ALC Tbox, that restricts the domain of the role „employs“ to „Company“ and the range to „Employee“. Define a „BigCompany“ as a Company, which employs at least 10 people. Try to define a small company as one, which employs at most 5 people. Is this possible in ALC?

4) Explain „Open World Assumption“ in the context of DLs.

5) Is the TBox on slide 12 definitorial? If yes, add axioms, such that it is no longer definitorial, otherwise remove axioms, such that it becomes definitorial.