Instructions:

- I expect homework submissions to be clear and easily readable. Your submissions should be typed and clearly written with complete sentences and well-organized logic, and should not be your first draft.
    - Latex is recommended.
- Please submit one single pdf file.
- Please be aware, the best way to avoid accidentally plagiarizing is to work on your own before you ask for the help of other resources.
- Each question has equal weight.
- Due date is **29.10.2021** 23:59. (It is 2 weeks because we expect new students this week.)

Questions:

1. "Algorithm Design" by Jon Kleinberg and Éva Tardos, Chapter 2, Exercise 1.
2. "Algorithm Design" by Jon Kleinberg and Éva Tardos, Chapter 2, Exercise 2.
3. "Algorithm Design" by Jon Kleinberg and Éva Tardos, Chapter 2, Exercise 3.
4. "Algorithm Design" by Jon Kleinberg and Éva Tardos, Chapter 2, Exercise 6.
5. "Algorithms" by Robert Sedgewick and Kevin Wayne, Chapter 1, Exercise 1.4.5.
6. "Algorithms" by Robert Sedgewick and Kevin Wayne, Chapter 1, Exercise 1.4.6.
7. Please compute the memory requirements of code fragments given in the 6^{th} question.