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Homework 05
METU CENG310 Fall 2021-2022
Data Structures and Algorithms with Python

Start Date: December 6th, 2021
Due Date: December 19th, 2021

1 Questions from the Textbook

Task-1: Solve the questions R-6.8, R-6.9 from the textbook.

Task-2: Write a clear pseudo code for C-6.27 from the textbook. Show that your algorithm is $O(n)$.

Task-3: Assume that there is a queue class, namely `WeirdQueue`, that implements queue ADT and internally uses two stack objects, namely $S1$ and $S2$ instead of an array. (Please recall that we have implemented queue ADT by making use of an array which is internally maintained.) Provide two separate pseudo codes for the `enqueue(e)` and `dequeue()` operations of `WeirdQueue`.

2 Instructions

Pertaining to the answers of this homework, **correct typing** of superscripts (e.g., n^2) and subscripts (e.g., n_0) **matters**. Due to this reason, this homework may be done on paper and **returned as a PDF** file containing the answer sheet captures (photos, scanned files). If you would like you can use MS Word or Latex, but your deliverable has to be a **single** PDF file. PDF file should be created so that the answers appears in the same order as the questions shown in the homework assignment document.

A Homework-05 page will be generated soon after the start date of this homework. All deliveries should be done over ODTUClass. Please also be aware of the late penalties (Please check the Announcements – Homework and Assignment Policy in ODTUClass if you have not already done so.). Should you have any questions pertaining to homework tasks, please ask them in advance (not on the due date) for your own convenience.