Assignment 1

Task 1 *Double Linked Lists*

2 p.

For double linked lists implement a method $rotate(r)$ that rotates the list so that list item i becomes list item $(i + r) \mod n$, $\forall i \in \{0, ..., n\}$ where n is the length of the list. What is the runtime? [Slides 24–42]

Task 2 *Linked List*

2 p.

We discussed a python implementation for linked lists. Add the missing operations empty, __len__, and delete. Check their implementation. [Slide 48]

Task 3 *Double Linked List*

6 p.

Provide a python implementation of double linked lists. [Slide 52]

Task 4 *Double Linked List 2*

2 p.

Write a method, reverse(), that reverses the order of elements in a Double Linked List. [Slide 52]

Task	1	2	3	4	total
Points	2	2	6	2	12
reached					