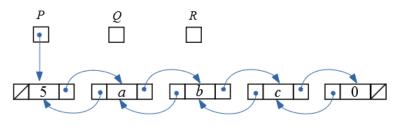
Assignment 4. 2020-10-07, 12 minutes

Question 1 (Pointer structure). Given the starting state (shown in the image) and the pseudocode, draw 2 pictures showing the pointer states after Line 7 and Line 12 of the code. In this example a, b, c are the last three digits of your Student ID.

Initial state of the pointers/nodes:

The structure of a single node:



- $1 \quad Q = P$
- $2 \quad Q = Q \rightarrow next$
- $3 \quad R = Q \rightarrow next$
- 4 if $Q \rightarrow info \leq P \rightarrow info$
- $5 R \rightarrow prev = P$
- 6 else
- 7 $P \rightarrow prev = R$

(Picture 1: Show the pointers at this point)

- $8 \quad P \to next \to next = R \to next$
- 9 **if** $R \rightarrow info \leq Q \rightarrow info$
- 10 $R \rightarrow next = P \rightarrow next$
 - 11 else
 - $12 R \to next = P \to prev$

(Picture 2: Show the pointers at this point)