FF: QUEUE

Oct 6, 2023

Create a video explaining and implementing the code for the following instructions

P1: Design a PRIORITY QUEUE Class

You may not use std::queue. You may use std::stack

Implement a priority queue class using only two stacks.

Your implementation must include these following member functions:

enqueue(x)

dequeue()

front()

size()

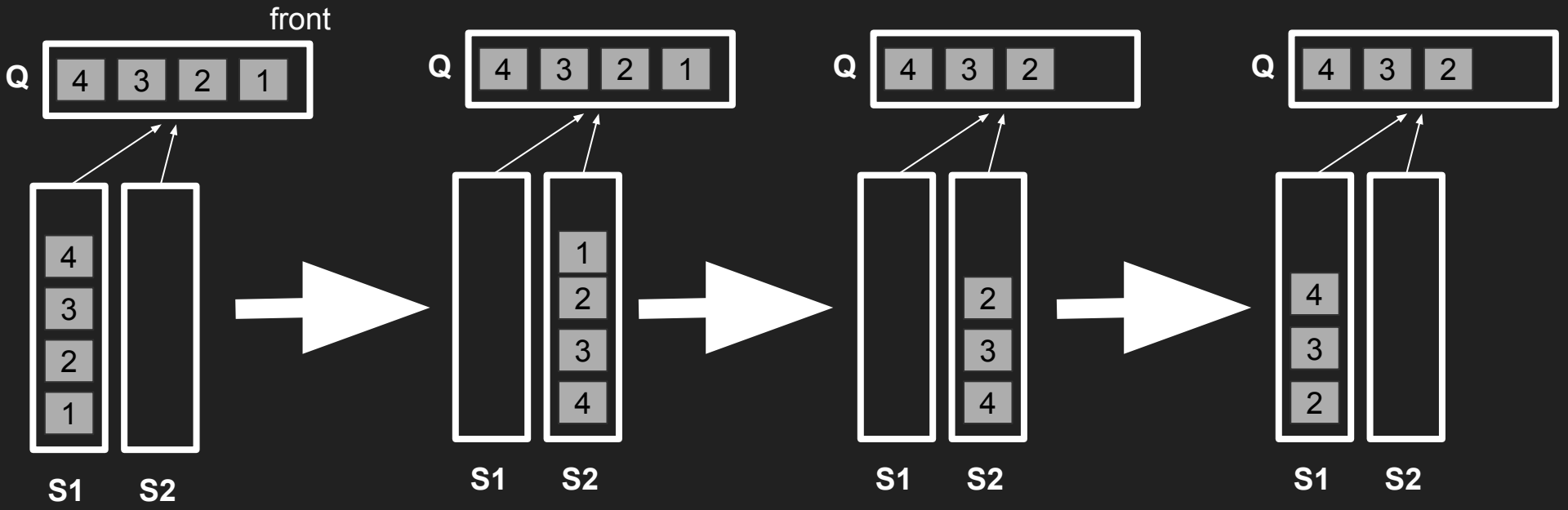
Explain normal queue functionality and how you recreated it with stacks.

What is the time complexity for each function?

P1: Example Starter Code

```
class queue{
    private:
        stack<int> s1;
        stack<int> s2;
    public:
        void push(int);
        //other functions go here
};
```

P1: DEQUEUE Function Visualized



P2: BFS

Explain the BFS algorithm. Use your own images, diagrams, drawings, animations, or slides to get your point across. No implementation required!

Provide one example where the BFS algorithm can be utilized.

SUBMIT

Upload video to coogTube or any other video sharing platform (youtube)

FF → Coogtube

Upload code to repl.it or any other code sharing platform

Fill out https://forms.gle/8GJ4SXoFK5njm8sV9

SUBMIT **BEFORE** 9 PM

Contact me if there are any upload/submission errors

Submit even if unfinished. There is partial credit!