## Allowed operations

**sa**: swap a - swap the first 2 elements at the top of stack a. Do nothing if there is only one or no elements).

**sb**: swap b - swap the first 2 elements at the top of stack b. Do nothing if there is only one or no elements).

ss: sa and sb at the same time.

**pa**: push a - take the first element at the top of b and put it at the top of a. Do nothing if b is empty.

**pb**: push b - take the first element at the top of a and put it at the top of b. Do nothing if a is empty.

**ra**: rotate a - shift up all elements of stack a by 1. The first element becomes the last one.

**rb**: rotate b - shift up all elements of stack b by 1. The first element becomes the last one.

**rr**: ra and rb at the same time.

**rra**: reverse rotate a - shift down all elements of stack a by 1. The last element becomes the first one.

**rrb**: reverse rotate b - shift down all elements of stack b by 1. The last element becomes the first one.

**rrr:** rra and rrb at the same time.