Problem

Email Service Providers like Gmail, Outlook, Yahoo etc rate limit the senders if the same inboxes are used to send too many emails.

Design & implement a frequency based load balancer for an email sending platform:

There are N email inboxes, we are only allowed to send up-to X emails every Y minutes.
At any point in time, we must select the best inbox to use to send the email.
The email volume must be as fairly distributed as possible.

0 < N < 1000, 0 <= X <= 100, 5 <= Y <= 180

N=1, 10 emails every 5 minutes, (1,-1)

10.00am 2 1 [2] // [1 2 3 4 5]
10.01am 3 1 [2,3]
10.02am 0 1 [2,3]
10.03am 5 1 [2,3,5]
10.04am 4 -1 [2,3,5]
10.05am 1 -1 [2,3,5]
10.06am 1 1 [3,5,1]
10.07am 2 -1 [3,5,1]