For this assignment, even though it has programming, you should work by yourself; you may discuss problems in line with the collaboration policy, but you are not to work in a team.

The last part of the assignment can be challenging, since it is open-ended. I’ll be open to extensions.

Do the following exercises from Mitzenmacher and Upfal: 5.5, 5.17, 5.21.

You will also do the exploratory assignment in section 5.8 of the book. This part will be worth 25 points instead of the usual 10. Please read the assignment carefully, and try to solve all three theoretical problems given at the end of the assignment.