Homeworks for 17.11. (Pasi Lassila)

1. Consider a knapsack with
   $K = 2, b_1 = 1, b_2 = 2, \rho_1 = 3, \rho_2 = 2, C = 10$. Simulate the knapsack using the simple MC method (slide 16-17 in the handout). Plot the point estimate of B_1 (blocking probability of class-1) as the number of samples grows, where the convergence of the estimator can be seen.
2. Plot the min and max values of the 95% confidence interval for each point estimate (slides 14 and 15). You should see how the length of the confidence interval becomes smaller as the simulation proceeds.