

MPRI 2-24-1: Algorithms and Uncertainty (2023)

Homework 6 (the previous one was in fact number 5)

Due on October 27, beginning of class

Instructions You can write your solutions either in English or French. Please observe the homework policy as described in the course web page. But please, please, write your name on your solution.

Design a dynamic program which allows to maximize the expected selected value. The threshold for accepting value X_i could be different for every i .

Suppose we have 10 random variables with uniform distribution on $[0, 1]$. Compare the performance of your dynamic programming base solution with the median based stopping rule (by Samuel-Cahn)?