

NAME: MOHAMMED MUBAREK

ID: ADS21B00260Y

COURSE TITLE(CODE)--DATA STRUCTURES& ALGORITHMS I(CS203)

You are given two algorithms A and B where A has 3,500 instructions and runs in 3 seconds; while B has 26,400 instructions and runs in 2 seconds. If you are required to compare the 2 algorithms, what criteria should you use to determine which of them is better in solving the given problem?

The ideal solution will be to express the runtime of both A and B as a function of the input size or the instructions (n), then use asymptotic analysis whereby we determine the order of growth of each of these two algorithms. This will help us determine the most efficient and the best algorithm out of the two.