

2) (10 pts) ANL (Algorithm Analysis)

A backtracking solution took $O(n(k^n))$ time where n is the number of decisions, and k was the number of options for each decision. With n of 20 and k of 1 the time it took was approximately 10 seconds. What is the expected time required for an input of 10 decisions ($n=10$) where each decision has 2 options ($k=2$) in **seconds**?