

Derivatives vs Marks runtimes

$((a)^* + (aa)^* + (aaa)^* + (aaaa)^* + (aaaaa)^*)^*$ and strings $\underbrace{a \dots a}_n$

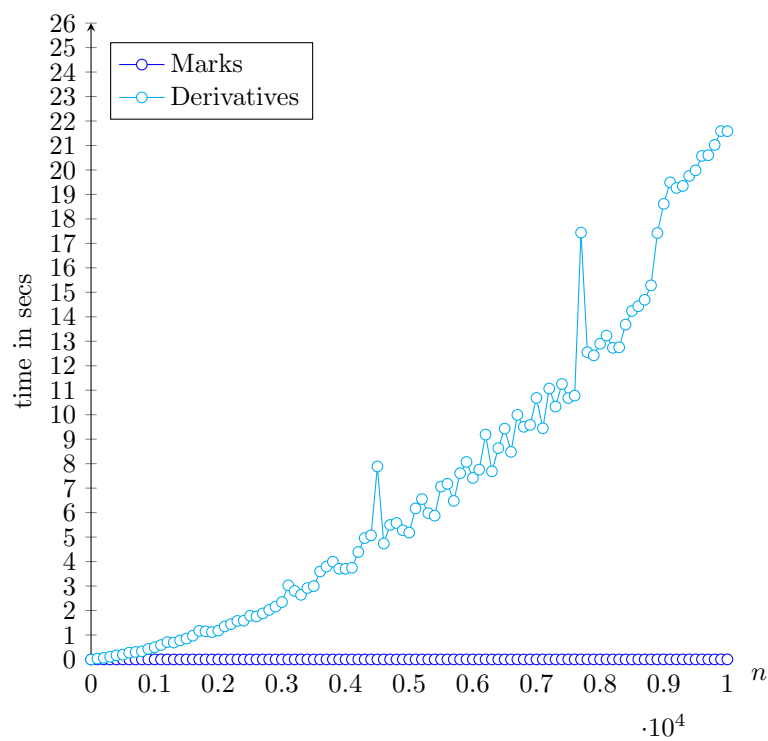


Figure 1: Runtimes of Derivatives vs Marks

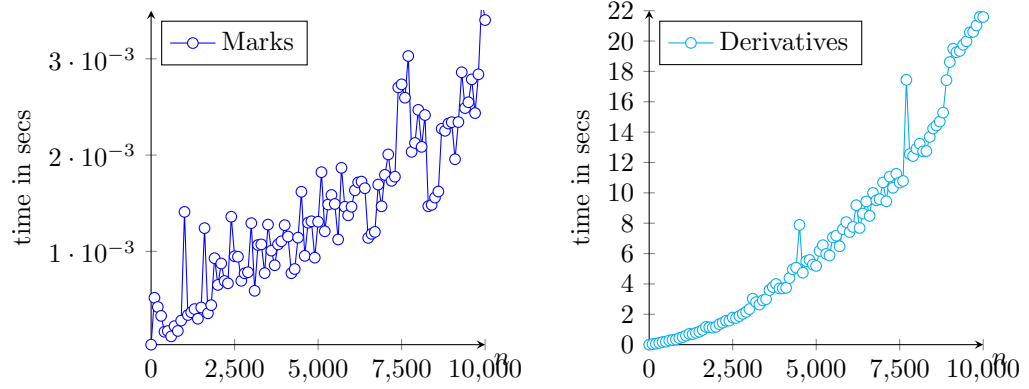


Figure 2: Runtime comparison of derivative-based and mark-based regular expression matchers for $((a)^* + (aa)^* + (aaa)^* + (aaaa)^* + \dots)^*$ with input strings of length n .