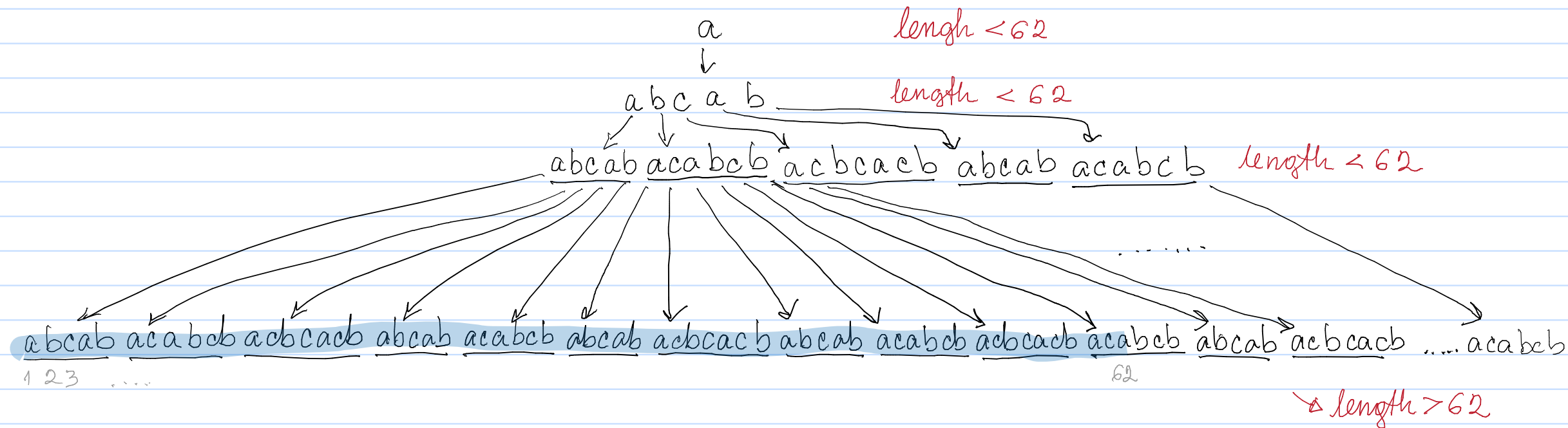


a

$n = 62$



For  $n=62$ , the final result is the square-free word highlighted in blue