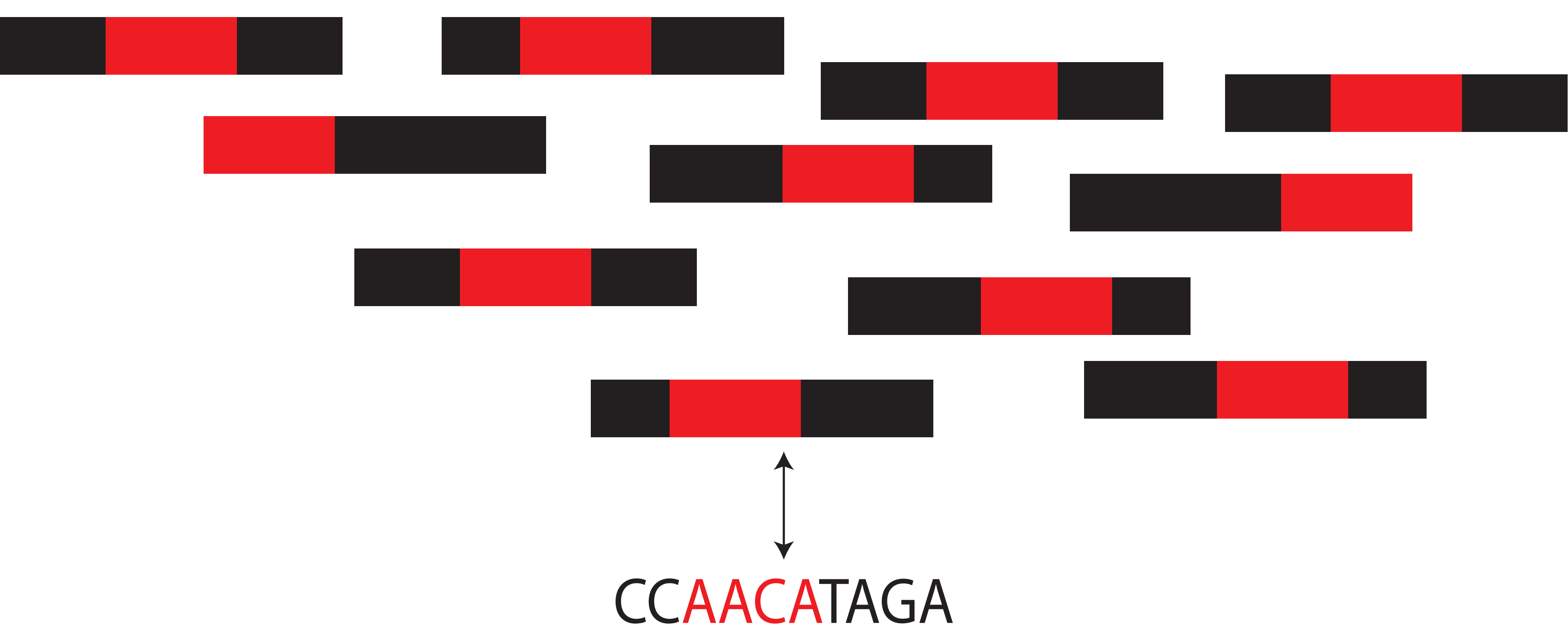
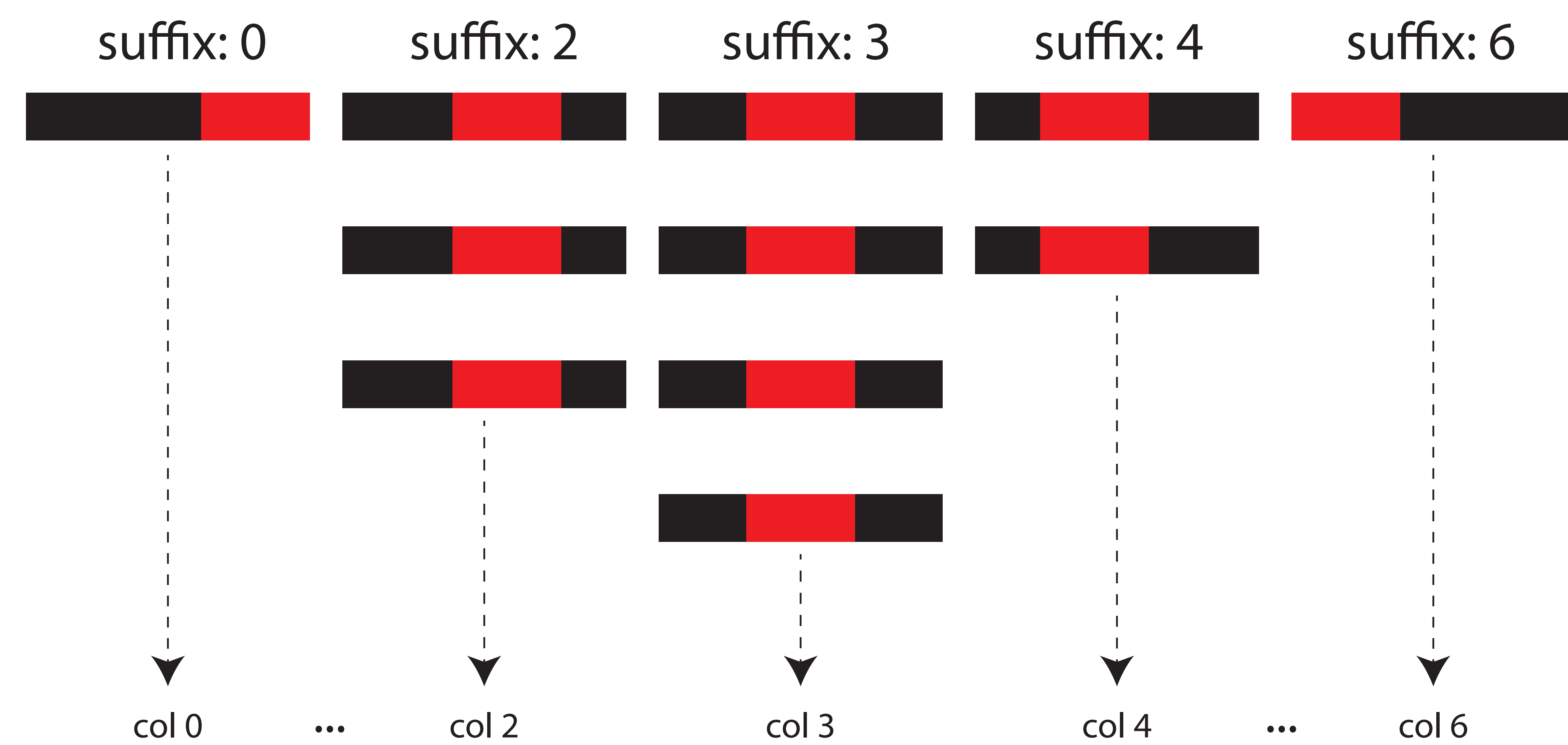


a) input k-mers with minimizer in red



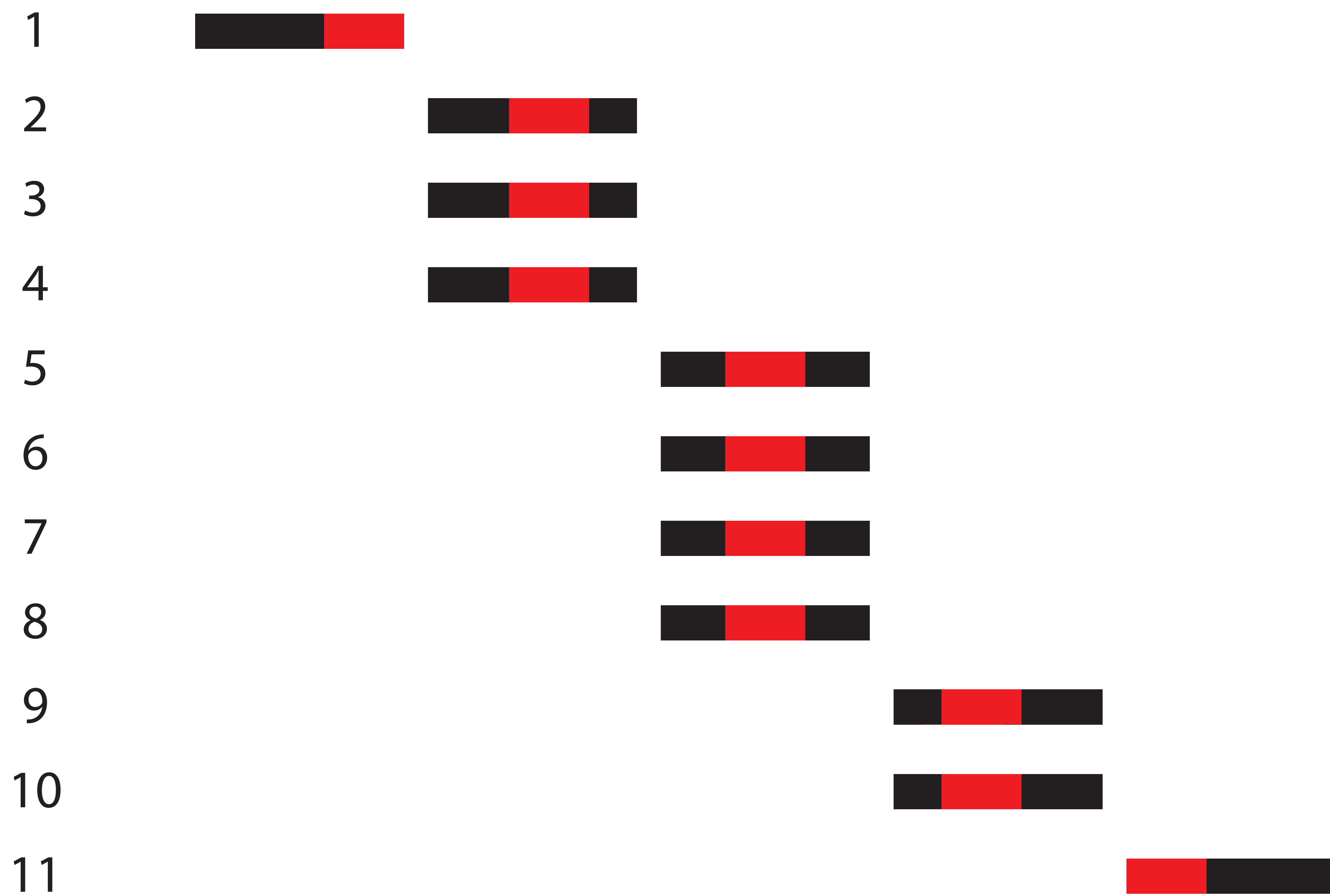
b) k-mers are divided based on minimizer position



col 0 col 1 col 2 col 3 col 4 col 5 col 6

1						
		2				
		3				
		4				
			5			
			6			
			7			
			8			
				9		
				10		
						11

d) matrix representation using matrix rows IDs.



c) each independently inserted k-mer can be considered as a super-k-mer in the unordered list (row). By dividing k-mers by the position of their minimizer (column), the matrix representation is derived.