

# Constructing Suffix Arrays

- Easy  $O(n^2 \log n)$  algorithm:  
sort the  $n$  suffixes, which takes  $O(n \log n)$  comparisons,  
where each comparison takes  $O(n)$ .
- There are several direct  $O(n)$  algorithms for constructing suffix arrays that use very little space.
- The Skew Algorithm is one that is based on divide-and-conquer.
- An simple  $O(n)$  algorithm: build the suffix tree, and exploit the relationship between suffix trees and suffix arrays (next slide)