Define an OCaml function \texttt{rotations} that will compute the list of all rotations of a given list. For example

\[
\texttt{rotations [1; 2; 3] = [[1; 2; 3]; [2; 3; 1]; [3; 1; 2]]}
\]

The order in which the rotations occur is unimportant.

Carefully explain how your function works and estimate the time complexity of your solution.