Exercise for getting familiar with OCaml. Due date: Oct 31st in class.

1. (Ullman 98, 2 points) Write a function that flips alternate elements of a list. For example, if the input is [1,2,3,4,5], the result would be [2,1,4,3,5]. If the length of the list is an odd number, the last element remains at the end.

2. (Ullman 98, 2 points) Write a function that takes a list of pairs of integers, and orders the elements of each pair such that the smallest number is first. For example, if the input is [(1,2),(2,1)], then the output would be [(1,2),(1,2)].

3. (Chailloux et al., 2 points). Write a function `merge_i` which takes as input two integer lists sorted in increasing order and returns a new sorted list containing the elements of the first two.

4. (Chailloux et al., 2 points) Write a general function `merge` which takes as argument a comparison function and two lists sorted in this order and returns the list merged in the same order. The comparison function will be of type `'a -> 'a -> bool`.