Write a function findExtreme that takes a function (with type int $\times$ int $\rightarrow$ bool) and a list of integers and uses the function to select the extreme element (least, greatest, etc) of the list. Specifically, the function that findExtreme takes as a parameter defines a way to order int, that is, it compares two ints (say $a$ and $b$ ) and returns true if $a$ comes before $b$ and false otherwise (mathematically, this function is a total order). Thus findExtreme is a generalization of findGreatest. For example, findExtreme (fn (a, b) => a > b, [6, 4, 18, 9, 2]) would return 18. (This problem is not naturally solved using map or filter.)

