Exercise 1.4.18 Local minimum of an array. Write a program that, given an array a[] of N distinct integers, finds a local minimum: an index i such that a[i-1] ¡ a[i] ¡ a[i+1]. Your program should use $\sim 2lgN$ compares in the worst case..

Solution: Notice it says $2lgN$ worst case. Since it says lgN, likely have to use binary search but twice since $2lgN$.

- Examine middle elements
- Compare to neighbours
- If smallest, then it is the local min
- If bigger than LHS, then a local-min exists on LHS
- Same thing if RHS is smaller.
- If reaches element end and nothing else is bigger, then it is least element.
- ie; 0,1,2,3,4,5,3,2,1