## Convex Hull Algorithm :-

**Time Complexity:**

**The algorithm takes O(n Log n) time .**

( n be the number of input points.)

**Time complexity Analysis:-**

if we use a O(nLogn) sorting algorithm.

1. finding the bottom-most point takes O(n) time.
2. The second step (sorting points) takes O(nLogn) time.
3. The third step takes O(n) time. In the third step, every element is pushed and popped at most one time.
4. So the step to process points one by one takes O(n) time,

**Overall complexity is =>**

**O(n) + O(nLogn) + O(n) + O(n)** which is **O(nLogn).**