

Given a sorted array of integers, find the starting and ending position of a given target value.

Your algorithm's runtime complexity must be in the order of  $O(\log n)$ .

If the target is not found in the array, return  $[-1, -1]$ .

**Example:**

Given  $[5, 7, 7, 8, 8, 10]$

and target value  $8$ ,

return  $[3, 4]$ .