

658. Find K Closest Elements

Description

Given a **sorted** integer array `arr`, two integers `k` and `x`, return the `k` closest integers to `x` in the array. The result should also be sorted in ascending order.

An integer `a` is closer to `x` than an integer `b` if:

- $|a - x| < |b - x|$, or
- $|a - x| == |b - x|$ and $a < b$

Example 1:

Input: `arr = [1,2,3,4,5]`, `k = 4`, `x = 3`
Output: `[1,2,3,4]`

Example 2:

Input: `arr = [1,2,3,4,5]`, `k = 4`, `x = -1`
Output: `[1,2,3,4]`

Constraints:

- $1 \leq k \leq \text{arr.length}$
- $1 \leq \text{arr.length} \leq 10^4$
- `arr` is sorted in **ascending** order.
- $-10^4 \leq \text{arr}[i], x \leq 10^4$

