Upper Bound

Upper Bound. A value that is greater than or equal to every element of a set of data.
Example: in {4,6,14,26,40} 40 is an upper bound. But 41 is also an upper bound as it is greater than any element of that set. In fact, any value 40 or above is an upper bound, such as 50 or 1000.

upper_bound() is a standard library function in C++ defined in the header. It returns an iterator pointing to the first element in the range [first, last) which is greater than value, or last if no such element is found. The elements in the range shall already be sorted or at least partitioned with respect to value.
Example:
Input: 10 20 30 30 40 50
Output: upper_bound for element 30 is at index 4
It is a must that the array must be sorted and the function returns an iterator.