Bitwise operator Assignments

Question-1

Write a program to find largest number in an array that is not a perfect cube such that complexity must be of the order O(n).

Input: $arr[] = \{16, 8, 25, 2, 3, 10\}$

Output: 25

25 is the largest number that is not a perfect cube.

Input: arr[] = {36, 64, 10, 16, 29, 25}

Output: 36

Question-2

Write a program to find Number of pairs in an array with the sum greater than 0. Try to keep complexity below $O(n^2)$

Input: $arr[] = \{ 3, -2, 1 \}$

Output: 2 Explanation:

There are two pairs of elements in the array whose sum is positive. They are:

 ${3, -2} = 1$ ${3, 1} = 4$

Input: $arr[] = \{ -1, -1, -1, 0 \}$

Output: 0 Explanation:

There are no pairs of elements in the array whose sum is positive.