

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.