1 3 7 6 5 2 9 0 4 8   target = 8

0 1 2 3 4 5 6 7 8 9

{ 0 1 1 2 3 3 3 4 5 5 5 5 7 7 8 8 9 }

O(n) + O(n log n) 9xe   8xe   O(n log n)

0 8
1 7
3 5

-5 -5 -2 -1 0 2 4 4 7 8 8 8 9 11 14 14

$$\text{target} = 6$$

$$\begin{cases} -2 & -2 & 4 \\ -2 & 0 & 2 \end{cases} \quad \boxed{2}$$

[-8 -2 -2 0 2 4
         -2 -2 -1]

$$\text{target} \quad 6$$

$$O(n) \times n$$

$$\vee \quad 2 \qquad \boxed{\quad} \qquad O(n^2) +$$

$$O(n \log n)$$

-8

8

two Sum

-2

$$\boxed{O(n^2)}$$

-2 -2 0 1 2 3 4   Conin

-6

-2 -2 -2   -6

i == 0

-2 -2 -2 -2 1 2 2 3 4 4

                              No

-2 -2 4   -2 -2 4   -2 -2 -2

i i i i

-2 -2 0 1 1 2 2 3 4 4

i j k

```java
public static void threeSumBrute(int[] arr) {
    int n = arr.length;
    Arrays.sort(arr);
    for(int i = 0; i < n; i ++) {
        if(i != 0 && arr[i] == arr[i - 1]) continue;
        for(int j = i + 1; j < n; j ++) {
            if(j != i + 1 && arr[j] == arr[j - 1]) continue;
            for(int k = j + 1; k < n; k ++) {
                if(k != j + 1 && arr[k] == arr[k - 1]) continue;
                if(arr[i] + arr[j] + arr[k] == 0) {
                    System.out.println(arr[i] + " " + arr[j] + " " + arr[k]);
                }
            }
        }
    }
}
```

target = -4
$$\begin{cases} -2 & -3 & 4 \\ -2 & 0 & 2 \\ -2 & 1 & 1 \end{cases}$$

-2 -2 -2

0

i j K K
-2 -2 -2 -2 1 2 2 3
0 1 2 3 4 5 6 7

$-2 == -2$

$i = 0$
$j = 1$
$K = 2$ 3

$j = 2$

-2

$K != j + 1$

$-2 + (-2) + (-2)$

$\dfrac{-2}{1}$ —— ——

② //

-2

$-2 \; (-2) \begin{pmatrix} 0 & 0 & 1 & 1 & i & 2 & 2 & 3 & 3 & 3 & 3 \\ 0 & 5 & 8 & & & & & & & & \end{pmatrix}$ ैं है

-2

$-(-2)$

2

$-2 \quad 0 \quad 2$

$-1078 \quad 1078$

1

-1

3

$0-5$