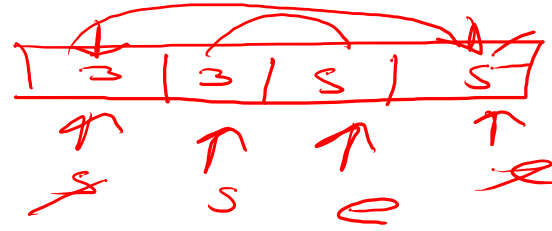
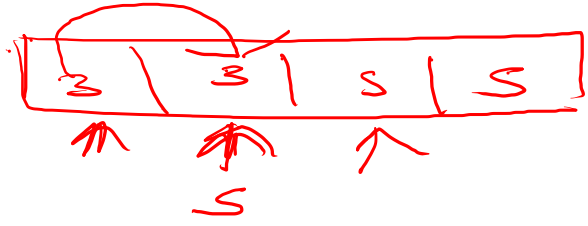
```
4
3 3 5 5
8
```

① Two pointers Algorithm

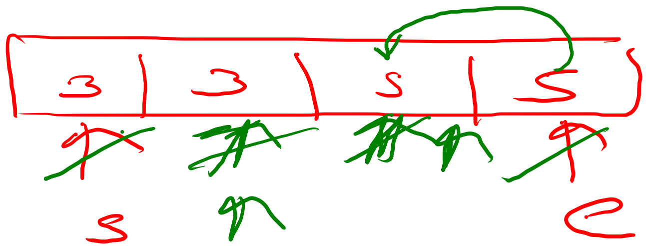




Output

3 5

3 5 2



$3+5 == 8$

$8 == 8$

tar = 8

sxso("____");

while();

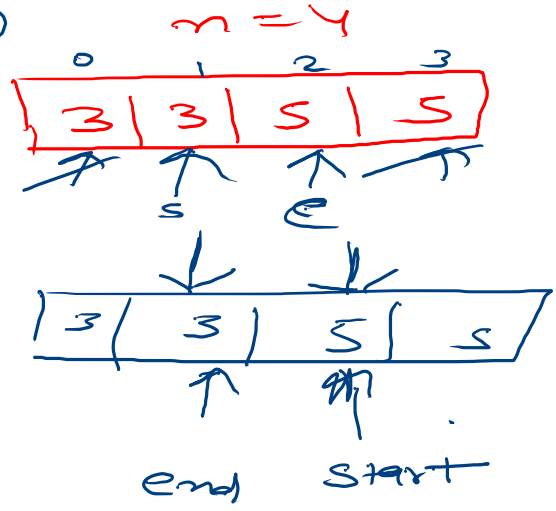
while();

start++;

end--;

```java
Arrays.sort(arr);
int start=0;
int end = arr.length-1;
while(start<end){
    int sum=arr[start]+arr[end];
    if(sum==target){
        System.out.println(arr[start]+" "+arr[end]);
        // remove duplicates
        while(arr[start]==arr[start+1]){
            start++;
        }
        //end
        while(arr[end]==arr[end-1]){
            end--;
        }
        start++;
        end--;
    }
    else if(sum>target){
        end--;
    }else{
        start++;
    }
```

start + start = 1



s = 0
e = 3

0 < 3

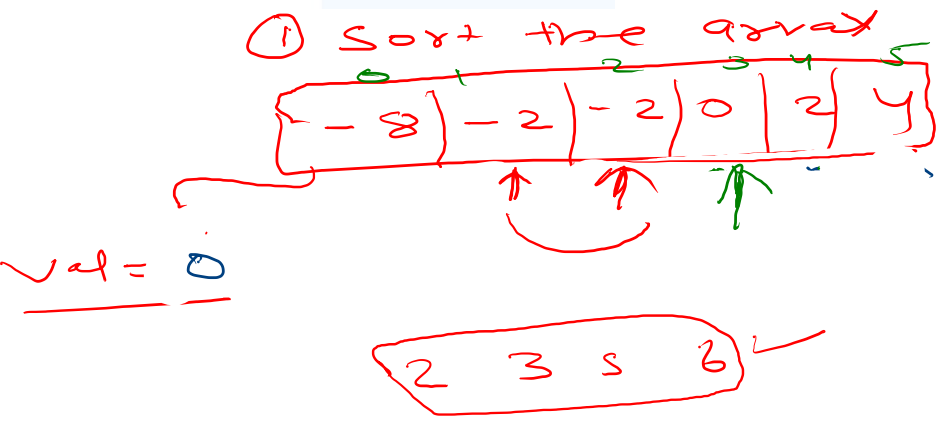
output :

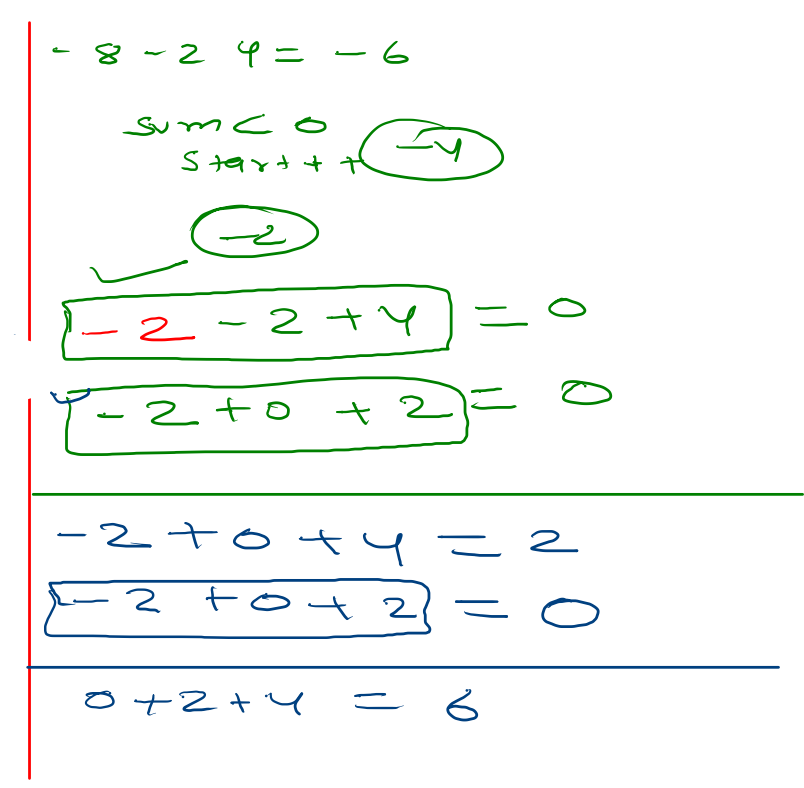
3 5

2 < 1 X

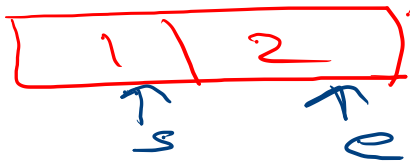
Sample Input 0

```
6
-2 0 2 4 -2 -8
```





```
2
1 2
3
```



limit = 3

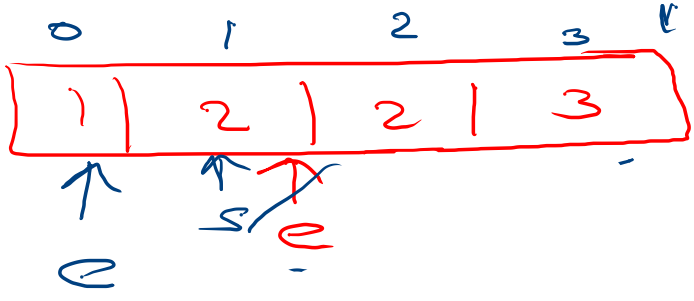
```
int boats = 0;
while(start <= end) {
    if(start + end <= limit)
    {
        start++;
    }
    }
    right--;
    boat++;
```

```
4
3 2 2 1
3
```

boat = ~~0~~ 2 (3)

int s = 0;

e = n - 1;



s = 1

e = 0

1 <= 0;

while(s <= e)

if(s+e <= l) {

s++;

}

--;

boat++;

}

Prefix sum l = 2 r = 4

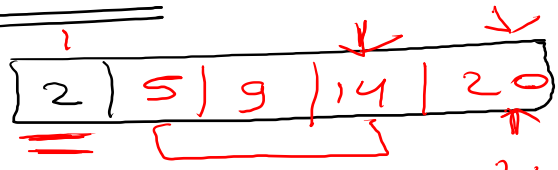
2 - 1

18

=5

prefix

suffix

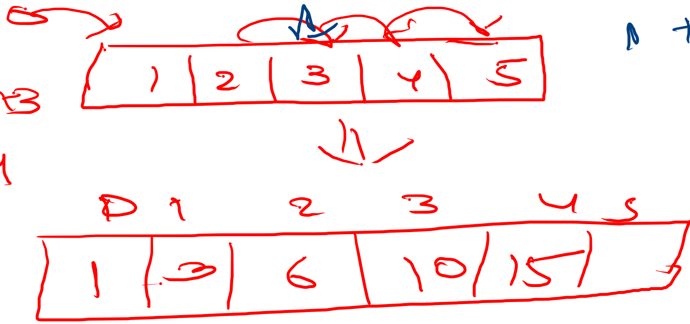


14 - 2 = 9

(3)

l, r

20 - 2 = 18



1 to n

sum = X 3 +3

= 6 +4

= 10

10 + 5

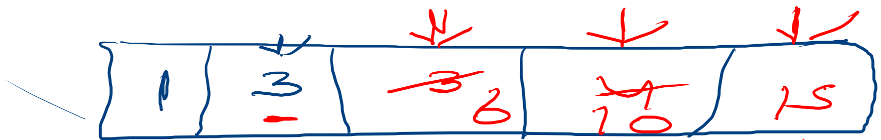
15

1 - based Indexing

0 - based Indexing

arr[i] = arr[i] +

arr[i-1];



i = 1

2 + 1

arr[i] = arr[i] + arr[i-1];