y = [-4, -6, 7, 8, 5, 0, -3, 4, 8, -2, -1, -6, 5]

Brute → In brute force we might need to generate
force
all possible subarrays of length 3, & then
traverse then to get their first -ve.

$O(nk)$

$\text{time} \rightarrow O(n)$ i^i K=3

$L = [-4, -6, 7, 8, 5, 0, -3, 4, 8, -2, -1, -6, 5]$
        0   1   2 3 4 5   6   7 8   9 10 11 12

	10	11	

↑ front of queue   ↳ que of length k

-4	-3
-6	-2
0	-2
0	-2
-3	-1
-3	

if we get a -ve no, we add it in the que

otherwise not.

Every time front of the queue will be our ans.

↳ if a customer gives us 5 Rs note, we will store it so we don't have to give a change.

↳ if a customer gives us 10 Rs note, we will give a change of 5 Rs, but if we don't have 5Rs note we will return fake.

In order to keep a track available 5Rs note, we can keep a counter for it.

if someon geny us 20 Rs note, we have 2 option

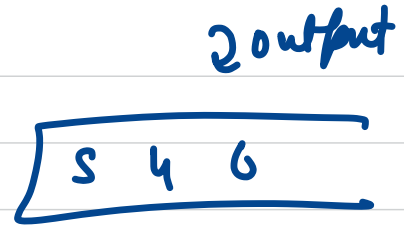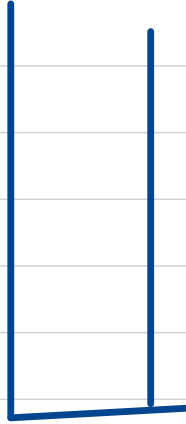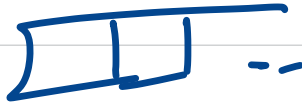i) either relese the one 6Rs note & one 10 Rs note

2) or return three 6 Rs notes

```
                    countfive = 0    , countTen = 10
         for (i=0; i<n; i++) {                              // O(n)
             if (arr[i] == 5)
                     countfive ++
             else if (arr[i] == 10) {
                     if (count five > 0
                         count five --;
                         count Ten ++;
                     } else {
                         return false;
                     }
             } else {  // case of 20 Rs note
                 if (count five > 0   and   count Ten > 0)
                         countfive --;  count Ten --;
                 } else if (count five >= 3)
                         count five -= 3;
                 } else  return false;
         }   }
                                                    return True
```
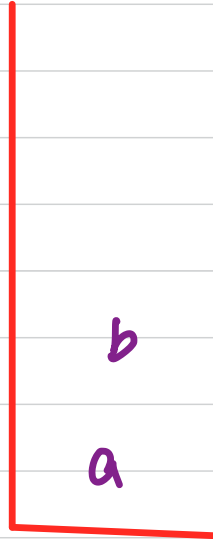
2 output

5 4 6

input

| | | | d | e |

yes

output

| | a | b | c | d |

c

c

LIFO

b

a

$a \, b \, 2C \, 3$ $K = 8$

$\boxed{n} \, \times 3$

Ex $Sr \Rightarrow \boxed{6} \rightarrow \times \quad M \text{ times} \quad \overset{repeated}{\rightarrow} \quad \boxed{5m}$

$K = 8$ if we want   to get   the Kth char

$\boxed{K \, \sphericalangle \, 0S}$

abcde   m = 3

abcde abcde   abcde

8905 → 3rd

ab2c3 $\longrightarrow$ r=8

5 lylu 3

8905 ← 3rd chas of ab2c