

HW_Tickets Shopping

```
Queue<Integer> que = new LinkedList<>();
```

```
for(int i = 0; i < n; i++){  
    que.add(i);  
}
```

```
int time = 0;
```

```
while(tickets[k] > 0){  
    int person = que.poll();  
    if(tickets[person] > 0){  
        tickets[person]--;  
        time++;  
        if(tickets[person] > 0){  
            que.add(person);  
        }  
    }  
}  
  
System.out.println(time);  
}
```

$O(n)$

arr = $\begin{matrix} 1 & 2 & 3 & 2 \\ 0 & 1 & 2 \end{matrix}$

k=2

0	1	2
2	3	2
1	2	1

t = 0 * 2

2 > 0 T

p = 2 > 0 T

p = 1 > 0

2	3	2	1
1	2	1	0

1 > 0 T

0 > 0 f

HW_First non-repeating character in a stream 3

```
public static String repeat(String str){  
  
    int n = str.length();  
  
    int count[] = new int[26];  
    Queue<Character> que = new LinkedList<>();  
    StringBuilder sb = new StringBuilder();  
  
    for(int i = 0; i < n; i++){  
        char ch = str.charAt(i);  
        count[ch - 'a']++;  
  
        que.add(ch);  
  
        while(!que.isEmpty()){  
            char front = que.peek();  
            if(count[front - 'a'] > 1){  
                que.poll();  
            }  
            else{  
                sb.append(front);  
                break;  
            }  
        }  
        if(que.isEmpty()){  
            sb.append("#");  
        }  
    }  
    return sb.toString();  
}
```

str = aabc

count =

0	1	2							
1	1	1							

2

que =

a	a	b	c
---	---	---	---

front = 'a' | 'a' | 'b' | 'b'
1 > 1 F | 2 > 1 T | 1 > 1 F | 1 > 1 F

sb = "~~a~~ | a#b b"

o/p → a#bb