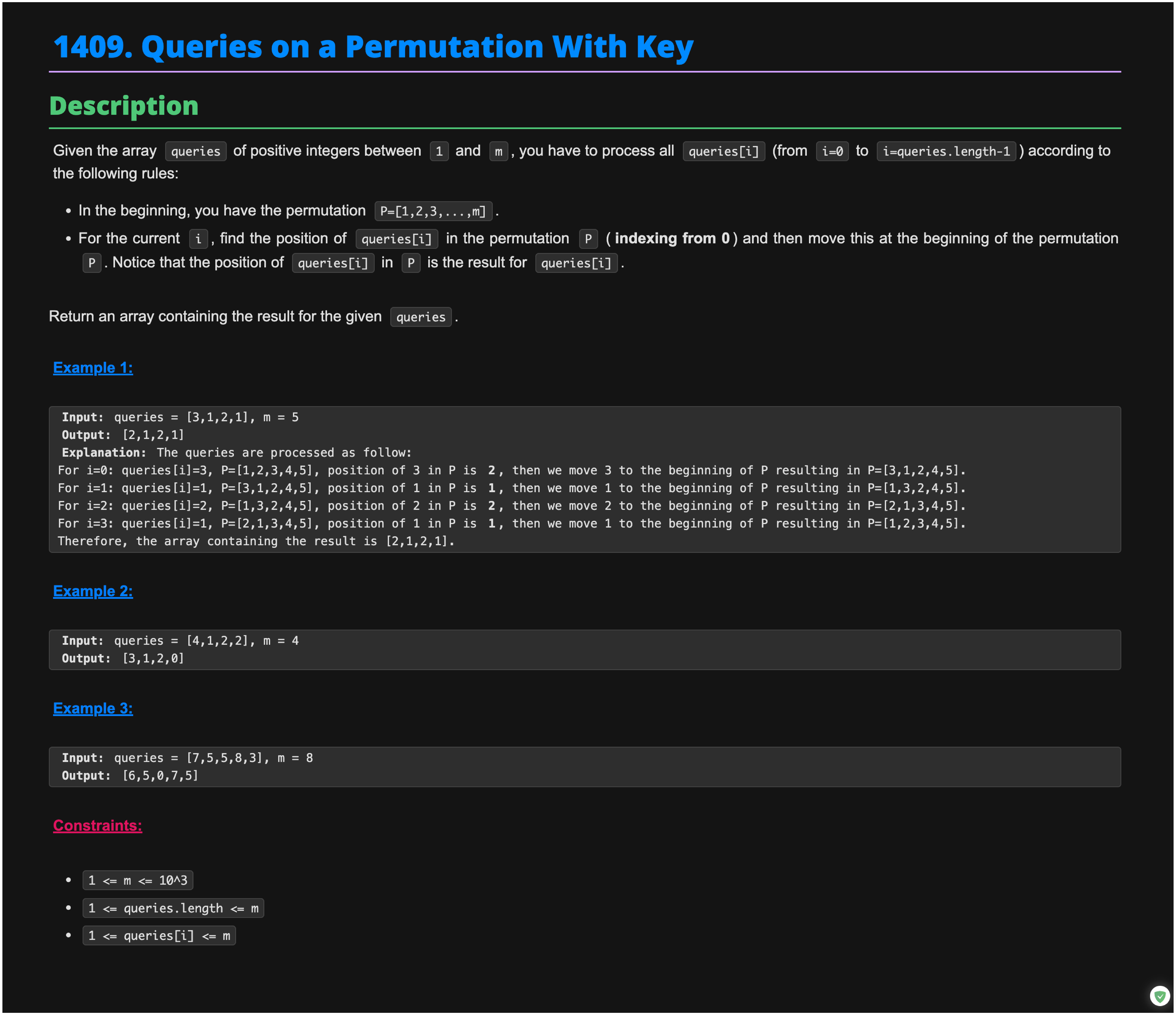

1409. Queries on a Permutation With Key

Description

Given the array `queries` of positive integers between `1` and `m`, you have to process all `queries[i]` (from `i=0` to `i=queries.length-1`) according to the following rules:

- In the beginning, you have the permutation `P=[1,2,3,...,m]`.
- For the current `i`, find the position of `queries[i]` in the permutation `P` (**indexing from 0**) and then move this at the beginning of the permutation `P`. Notice that the position of `queries[i]` in `P` is the result for `queries[i]`.

Return an array containing the result for the given `queries`.

Example 1:

```
Input: queries = [3,1,2,1], m = 5
Output: [2,1,2,1]
Explanation: The queries are processed as follow:
For i=0: queries[i]=3, P=[1,2,3,4,5], position of 3 in P is 2, then we move 3 to the beginning of P resulting in P=[3,1,2,4,5].
For i=1: queries[i]=1, P=[3,1,2,4,5], position of 1 in P is 1, then we move 1 to the beginning of P resulting in P=[1,3,2,4,5].
For i=2: queries[i]=2, P=[1,3,2,4,5], position of 2 in P is 2, then we move 2 to the beginning of P resulting in P=[2,1,3,4,5].
For i=3: queries[i]=1, P=[2,1,3,4,5], position of 1 in P is 1, then we move 1 to the beginning of P resulting in P=[1,2,3,4,5].
Therefore, the array containing the result is [2,1,2,1].
```

Example 2:

```
Input: queries = [4,1,2,2], m = 4
Output: [3,1,2,0]
```

Example 3:

```
Input: queries = [7,5,5,8,3], m = 8
Output: [6,5,0,7,5]
```

Constraints:

- `1 <= m <= 10^3`
- `1 <= queries.length <= m`
- `1 <= queries[i] <= m`