

Problem 6

Input (sigma) : list of size n, regarded as $\sigma(i) = \text{sigma}[i - 1]$.

```
In [ ]: def reverse_permutation(sigma : list) -> list:
        rev_p = [0 for _ in range(len(sigma))]
        for i in range(len(sigma)):
            rev_p[sigma[i]-1] = i+1

        return rev_p
```

Belows are some examples.

```
In [ ]: print(reverse_permutation([1,2,3]))
        print(reverse_permutation([4,1,3,2]))
        print(reverse_permutation([6,2,4,5,3,1]))

[1, 2, 3]
[2, 4, 3, 1]
[6, 2, 5, 3, 4, 1]
```