

Move zeros (283)

Use two pointers. Find the first zero of array, let's say it pointer p . start pointer q from $p+1$.

If the element is 0 , move on.

If element is non zero, swap $v[p]$, $v[q]$.

increment p by 1.

CODE

```
void moveZeros (vector<int> nums) {
```

```
    int p = 0
```

```
    for (; p < nums.size(); p++) {
```

```
        if (nums[p] == 0) break;
```

```
    }
```

```
    int q = p+1;
```

```
    for (; q < nums.size(); q++) {
```

```
        if (nums[q] != 0) {
```

```
            swap (nums[p], nums[q]);
```

```
            p++;
```

```
}
```

Time complexity $\rightarrow O(n)$

because only 1 pass of array is required

Space complexity \rightarrow Not relevant.