

Cyclic Sort

It is used to sort a dataset of elements in the range[0, N] which follow a specific pattern.

Time Complexity

Worst-case : $O(N)$

```
void cyclicSort(int[] array)
{
    int i=0;
    while(i<array.length)
    {
        int correctIndex = array[i];
        if(i!=correctIndex)
            swap(array, i, correctIndex);
        else
            i++;
    }
}

void swap(int[] array, int index1, int index2)
{
    int temp = array[index1];
    array[index1] = array[index2];
    array[index2] = temp;
}
```