

# Rotate a String Left by K Positions

## **Problem Statement:**

Write a program to rotate a given string *s* left by *k* positions without using any built-in string functions.

For example, rotating "abcdef" by 2 places would give "cdefab"

## **Program Code:**

### **typescript**

```
import * as readline from 'readline';

const rl = readline.createInterface({
  input: process.stdin,
  output: process.stdout
});

rl.question("Enter the string: ", (s: string) => {
  rl.question("Enter the number of positions to rotate: ", (kInput:
string) => {
    const k = parseInt(kInput);
    console.log(swapKplacesLeft(s.split(""), k).join(""));
    rl.close();
  });
});

function swapKplacesLeft(arr: string[], k: number): string[] {
  rev(arr, 0, k - 1);
  rev(arr, k, arr.length - 1);
  rev(arr, 0, arr.length - 1);
  return arr;}
```

```
function rev(arr: string[], start: number, end: number): void {  
  while (start <= end) {  
    const temp = arr[start];  
    arr[start] = arr[end];  
    arr[end] = temp;  
    start++;  
    end--;  
  }  
}
```

### **Sample Inputs and Outputs:**

**1)Input String:** aeiou, **k:** 2

**Output:**

iouae

**2)Input String:** hello, **k:** 3

**Output:**

lohel

**3)Input String:** acdfgh, **k:** 4

**Output:**

ghacdf

```
Enter the string: aeiou  
Enter the number of positions to rotate: 2  
iouae  
  
C:\Users\PRANAV S\Desktop\task>node Task1.js  
Enter the string: hello  
Enter the number of positions to rotate: 3  
lohel  
  
C:\Users\PRANAV S\Desktop\task>node Task1.js  
Enter the string: acdfgh  
Enter the number of positions to rotate: 4  
ghacdf
```