```java
public static String reverse(String str){
    char ch[] = str.toCharArray();

    int left = 0;
    int right = str.length() - 1;

    while(left < right){
        if(!Character.isLetter(ch[left])){
            left++;
        }
        else if(!Character.isLetter(ch[right])){
            right--;
        }
        else{
            char temp = ch[left];
            ch[left] = ch[right];
            ch[right] = temp;
            left++;
            right--;
        }
    }
    // modify the char array to string
    return new String(ch);
}
```

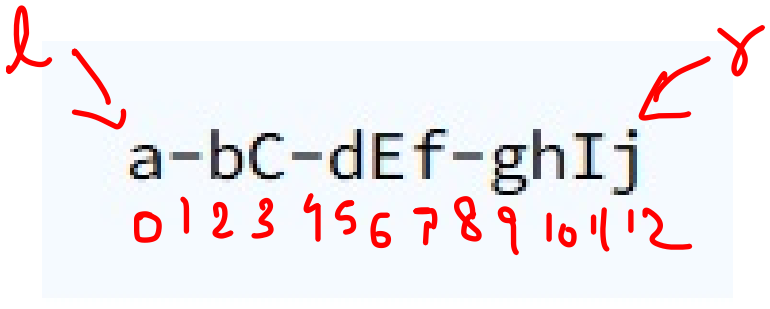
"a" → String

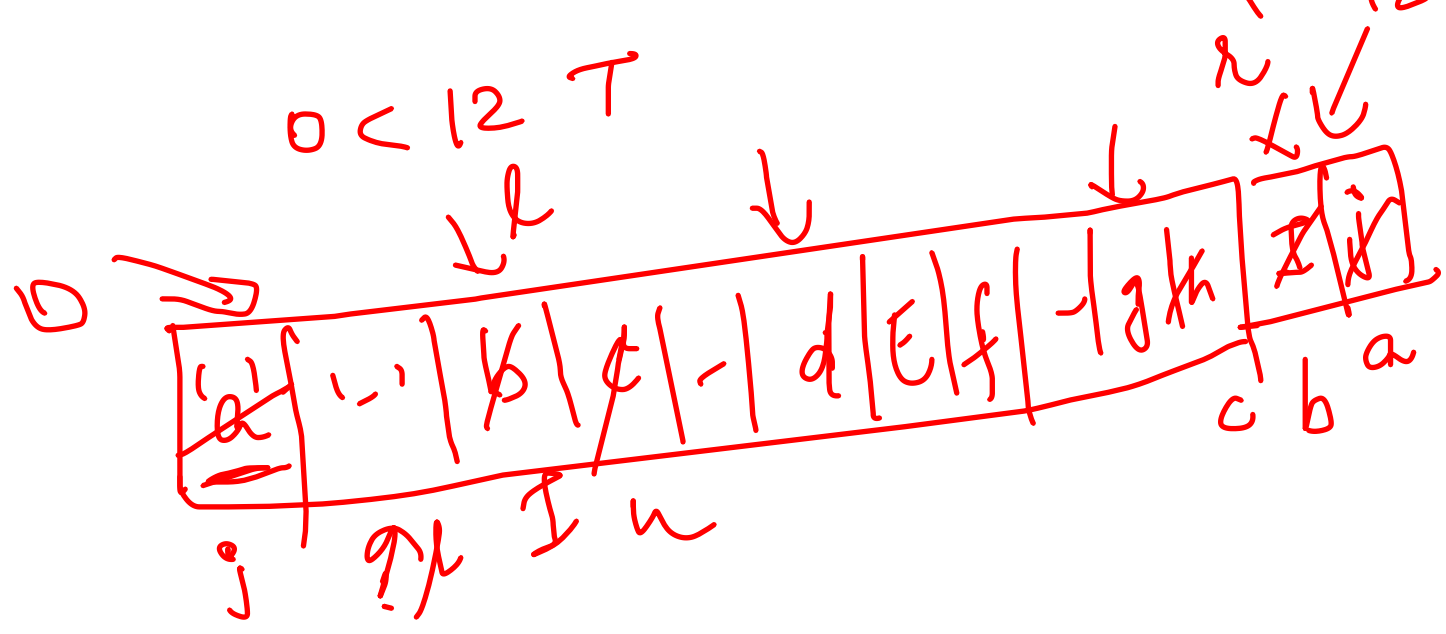
a → Integer

'a' → Character

O(n) — TC

SC





HW_reverse by words

```java
public static String reverseWords(String str){
    String words[] = str.split(" ");
    String result = "";

    for(int i = 0; i < words.length; i++){
        String ch = words[i];
        result += reverseString(ch) +  " ";
    }

    return result.trim();
}
```

O(n) — TC / SC

```java
public static String reverseString(String word){
    char ch[] = word.toCharArray();

    int left = 0;
    int right = word.length() - 1;

    while(left < right){
        // swap
        char temp = ch[left];
        ch[left] = ch[right];
        ch[right] = temp;

        left++;
        right--;
    }
    return new String(ch);
}
```