

HATFD1010

Rotate a String Left by K Positions

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 would give "cdefab".

Instructions: Do not use built-in rotation or substring functions. Implement the logic manually.

Program: java

```
import java.util.*;
public class ques {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        String s=sc.nextLine();
        String l=s;
        int k=sc.nextInt();
        int n=s.length();
        char[] arr=new char[n];
        int p=0;
        for(int i=k;i<n;i++){
            arr[p]=l.charAt(i);
            p++;
        }
        for(int i=0;i<k;i++){
            arr[p]=s.charAt(i);
            p++;
        }
        for(int i=0;i<n;i++){
            System.out.print(arr[i]);
        }
    }
}
```

Output:

Sample testcase 1:

Input: abcdef

K=3

Output:defabc

Sample testcase 2:

Input: friendship

k=5

Output: dshipfrien

Sample testcase 3:

Input: placement

K=1

Output: lacementp

Screenshot:

```
import java.util.*;
public class ques {
    Run main | Debug main | Run | Debug
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        String s=sc.nextLine();
        String l=s;
        int k=sc.nextInt();
        int n=s.length();
        char[] arr=new char[n];
        int p=0;
        for(int i=k;i<n;i++){
            arr[p]=l.charAt(i);
            p++;
        }
        for(int i=0;i<k;i++){
            arr[p]=s.charAt(i);
            p++;
        }
        for(int i=0;i<n;i++){
            System.out.print(arr[i]);
        }
    }
}
```

```
PS C:\Users\work\java> c::; cd 'c:\Users\work\java'; & 'C:\Program Files\Java\jdk-21\bin\java.exe' '-XX:+ShowCode
ing\Code\User\workspaceStorage\11121411aefcecae620de8a26f131f20\redhat.java\jdt_ws\java_f04a4d41\bin' 'ques'
abcdef
4
efabcd
PS C:\Users\work\java> ^C
PS C:\Users\work\java>
PS C:\Users\work\java> c::; cd 'c:\Users\work\java'; & 'C:\Program Files\Java\jdk-21\bin\java.exe' '-XX:+ShowCode
ing\Code\User\workspaceStorage\11121411aefcecae620de8a26f131f20\redhat.java\jdt_ws\java_f04a4d41\bin' 'ques'
abcdef
3
defabc
PS C:\Users\work\java> c::; cd 'c:\Users\work\java'; & 'C:\Program Files\Java\jdk-21\bin\java.exe' '-XX:+ShowCode
ing\Code\User\workspaceStorage\11121411aefcecae620de8a26f131f20\redhat.java\jdt_ws\java_f04a4d41\bin' 'ques'
friendship
5
dshipfrien
PS C:\Users\work\java> c::; cd 'c:\Users\work\java'; & 'C:\Program Files\Java\jdk-21\bin\java.exe' '-XX:+ShowCode
ing\Code\User\workspaceStorage\11121411aefcecae620de8a26f131f20\redhat.java\jdt_ws\java_f04a4d41\bin' 'ques'
placement
1
lacementp
PS C:\Users\work\java>
```