

## Toggle Case:- <https://www.hackerearth.com/practice/basic-programming/input-output/basics-of-input-output/practice-problem/algorithm/modify-the-string/>

hELLO  $\Rightarrow$  HeLLo

'A' = 65 | '1' = 49  
'B' = 66 | '2' = 50  
'C' = 67

int a = 'a';

a = 97  
z = 122

Lower

'a' = 97  
'b' = 98  
'c' = 99  
'z' = 122

Upper

'A' = 65  
'B' = 66  
'C' = 67  
'Z' = 90

'h'  $\Rightarrow$  'H'

'A' - 'a' + 'h'  
65 - 97 + 104  
72

if (curr is lower case) {

('A' - 'a') + 'c'

} else {

('z' - 'a' + 'A')  
}

'c'  $\Rightarrow$  'C'

'A' - 'a' + 'c'  
65 - 97 + 99  
67

75 - 97 + 122  
100

A = 75

a = 97

curr = 'c' = 99

## Sorting:-

[5, 1, 4, 2, 3]  $\Rightarrow$  [1, 2, 3, 4, 5]

### Selection Sort:-

0 1 2 3 4  
5, 1, 4, 2, 3  
1, 5, 4, 2, 3  
1, 2, 4, 5, 3  
1, 2, 3, 5, 4  
1, 2, 3, 4, 5

i = 0 1 2 3 4  
j = i to arr.length - 1  
minIdx = 1 3 4 4

arr = [1, 3, 5, 7, 9]  $\Rightarrow$  5  
4

i = 0 1 2 3 4

minIdx = 3

j = 4 5

T.C  $\Rightarrow O(n^2)$

S.C  $\Rightarrow O(1)$

$n^2 = 25$

$\Rightarrow$  for (i = 0 to arr.length - 2) {  
minIdx = i;

for (j = i + 1 to arr.length) {  
if (arr[minIdx] > arr[j]) {  
minIdx = j;  
}

if (i != minIdx) swap(arr, minIdx, i);

$$\underline{5 + 4 + 3 + 2 = 14 +}$$

7