**Problem Statement:** Toggle all characters in given string

In this problem, we have to change the characters case if a character is in lower case then uppercase should be printed and if a character is in uppercase then lowercase should be printed.

**Example:** If given string is aBcD then the output will be AbCd.

|  |  |
| --- | --- |
| Expected Input | Expected Output |
| AbCd  qqrgt  ASDFG  MsiT  IiItH | aBcD  QQRGT  asdfg  mSIt  iIiTh |

**Pseudo Code**

1. Enter a string ‘n’
2. Take l as length of the given string
3. Take r an empty string
4. Take u an empty string
5. Convert all characters in n to lowercase and store in r
6. Convert all characters in n to uppercase and store in u
7. Convert n,r,u into character arrays
8. Set i=1 and if i<=length then

8.1 If n[i]! = r[i] then print r[i] otherwise 8.2

8.2 If n[i]! = u[i] then print u[i]

8.3 Increment i

1. Print Not Possible
2. Stop

**Trace Table**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| n | l=str len(n) | r= ”” | u= ”” | r=lower case(n) | u=upper case(n) | i=1 | i<= length | n[i]! = r[i] | r[i] | n[i]!=u[i] | u[i] | i++ | Not Possible |
| AbCd | 4 |  |  | abcd | ABCD | 1 | True | True | a | False |  | 2 |  |
|  |  |  |  |  |  |  | True | False |  | True | B | 3 |  |
|  |  |  |  |  |  |  | True | True | c | False |  | 4 |  |
|  |  |  |  |  |  |  | True | False |  | True | D | 5 |  |
|  |  |  |  |  |  |  | False |  |  |  |  |  |  |
| MsiT | 4 |  |  | msit | MSIT | 1 | True | True | m | False |  | 2 |  |
|  |  |  |  |  |  |  | True | False |  | True | S | 3 |  |
|  |  |  |  |  |  |  | True | False |  | True | I | 4 |  |
|  |  |  |  |  |  |  | True | True | t |  |  | 5 |  |
|  |  |  |  |  |  |  | False |  |  |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Expected Input | Expected Output | Actual Output | Test Result |
| AbCd  qqrgt  ASDFG  MsiT  IiItH | aBcD  QQRGT  asdfg  mSIt  iIiTh | aBcD  QQRGT  asdfg  mSIt  iIiTh |  |

**Final Result**

**Expected Inputs and Outputs**



