

Transpose \Rightarrow

original	transpose
0 1 2	0 1 4 7
1 4 5 6	1 2 5 8
2 7 8 9	2 3 6 9
0 1 2	0 1 2

$$\text{mat}[i][j] = \text{trans}[i][j]$$

$$\text{trans}[j][i] = \text{mat}[i][j]$$

Strings \Rightarrow It is a collection of characters:
It can contain:

- Alphabets
- Numbers
- Special Characters
- Whitespaces

#Kushaal_2026@Dev

Kushaal W P

len = $\#$
#Kushaal_2026 \rightarrow (end of string) \rightarrow null character
{ '#', 'k', 'u', 's', 'h', 'a', 'a', 'l', '_', '2', '0', '2', '6', '\0' }
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
(n-1) end of string

$$\text{str1} = \text{str2}$$

$$[100] = [100] = \begin{array}{|c|c|c|c|c|c|c|} \hline k & u & s & h & a & a & l \\ \hline 0 & 1 & 2 & 3 & 4 & 5 & 6 \\ \hline \end{array}$$

\Rightarrow input
"Kushaal"
while (s1[i] != '\0')
{ s2[i] = s1[i]
i++
}
strcpy(s1, s2)

start \rightarrow [flag=1]
MALAYALAM
0 1 2 3 4 5 6 7 8
1 1 1 0 1 1 0
1 9-1-1 = 7
{ [ATK] \Rightarrow V75 }
(len = 9)
= 4
for (i=0; i < length/2; i++)
{ if (str[i] != str[length-1-i])
flag = 0;
break;
}
P
NP
if t=0
P

Steps \Rightarrow ① input \rightarrow string
② find the length (Kushaal)
③ Convert it to either complete uppercase or lowercase:
④ You know what to do!

ASCII
(+32
-32)

toupper
tolower
<ctype.h>

Homework \Rightarrow

① Compare two strings
s1 kush s2 kush
eq = !eq

② Count no of words in a string
Kushaal from Batch
4 words

i = kush
s and
flag = 0
break

if str[i] == '\0'
words++