```c
#include<stdio.h>
int main()
{
    int a[5][5], n, c, i, j;
    printf("\n Enter the number of rows and columns of the
matrix ");
    scanf("%d %d", &n, &c);
    printf("Enter the elements of the matrix \n");
    for(i=0; i<n; i++)
    {
        for(j=0; j<c; j++)
        scanf("%d", &a[i][j]);
    }
    printf(" The matrix before transpose is \n");
    for(i=0; i<n; i++){
        printf("\n");
        for(j=0; j<c; j++)
        printf("%d\t", a[i][j]);
    }
    printf("\n The matrix after transpose is \n");
    for(i=0; i<n; i++){
        printf("\n");
        for(j=0; j<c; j++)
        printf("%d\t", a[j][i]);
    }
    return 0;
}
```