```
def transpose(A, B):
for i in range(N):
for j in range(N):
    B[i][j] = A[j][i]

## driver code
A = [[1,1,1,1],
     [2,2,2,2],
     [3,3,3,3],
     [4,4,4,4]]

B = A[:][:] ## To store result

transpose(A, B)
print("Result matrix is")
for i in range(N):
for j in range(N):

print(B[i][j], " ", end=' ')

print()
```

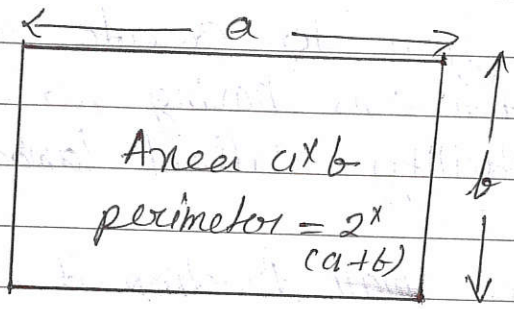
~~## This code is contributed by Ahmed A~~

⇒ Output:

```
Result matrix is
1 2 3 4
2 2 3 4
3 3 3 4
4 4 4 4
```

2. Program for Area and Perimeter of Rectangle :-

Ans. A rectangle is a flat in a plane. It has four sides an four equal angles of 90 degree each. In rectangl all four sides are not of equal length like squa sides opposite to each other have equal length. Both diagonals of rectangle have equal length




```
** Python 3 Code to find area
** and perimeter of rectangle

** Utility function
def areaRectangle(a,b):
    return (a*b)

def perimeterRectangle(a,b):
    return (2*(a+b))

** Driver function
a = 5;
b = 6;
Print("Area =", areaRectangle(a,b))
Print("Perimeter =", PerimeterRectangle(a,b))
```

SECTION - 5

Q2 Write python code to transpose of metrics. find the area and perimeter using function. prompt the user for input?

Ans Python Program to find transpose of a matrix

1. Transpose of a matrix is ~~of~~ obtained by changing rows to columns and columns to rows. In other words, transpose of A[][] is obtained by changing A[i][j] to A[j][i]

1	2	3
4	5	6
7	8	9

Input

1	4	7
2	5	8
3	6	9

Output

** For Square matrix : The below program finds transpose to A[][] and store the result in B[][], we can change N for different dimension.

```
** Python3 Program to find
** transpose of a matrix

N = 4

** This function stores
** transpose of A[][] in B[][]
```