#include <stdio.h>

#define ROWS 2

#define COLS 2

int main() {

int matrix[ROWS][COLS];

int i, j;

printf("Enter %d elements of the matrix:\n", ROWS \* COLS);

// Taking input for the matrix

for (i = 0; i < ROWS; i++) {

for (j = 0; j < COLS; j++) {

scanf("%d", &matrix[i][j]);

}

}

printf("The matrix is:\n");

for (i = 0; i < ROWS; i++) {

for (j = 0; j < COLS; j++) {

printf("%d ", matrix[i][j]);

}

printf("\n");

}

printf("The transpose of the matrix is:\n");

for (i = 0; i < COLS; i++) {

for (j = 0; j < ROWS; j++) {

printf("%d ", matrix[j][i]);

}

printf("\n");

}

return 0;

}

OUTPUT:

Enter 4 elements of the matrix:

1 2 5 3

The matrix is:

1 2

5 3

The transpose of the matrix is:

1 5

2 3