

```
#include <stdio.h>
int main() {
    int a[10][10], transpose[10]
[10], r, c;
    printf("Enter rows and
columns: ");
    scanf("%d %d", &r, &c);

    // assigning elements to
the matrix
    printf("\nEnter matrix
elements:\n");
    for (int i = 0; i < r; ++i)
```

```
for (int j = 0; j < c; ++j) {  
    printf("Enter element  
a%d%d: ", i + 1, j + 1);  
    scanf("%d", &a[i][j]);  
}
```

```
// printing the matrix a[][]  
printf("\nEntered matrix:  
\n");  
for (int i = 0; i < r; ++i)  
for (int j = 0; j < c; ++j) {  
    printf("%d ", a[i][j]);  
    if (j == c - 1)
```

```
    printf("\n");  
}
```

```
// computing the  
transpose
```

```
for (int i = 0; i < r; ++i)  
for (int j = 0; j < c; ++j) {  
    transpose[j][i] = a[i][j];  
}
```

```
// printing the transpose  
printf("\nTranspose of the  
matrix:\n");
```

```
for (int i = 0; i < c; ++i)
for (int j = 0; j < r; ++j) {
    printf("%d ", transpose[i]
[j]);
    if (j == r - 1)
        printf("\n");
}
return 0;
}
```