

(30) Write a program to find out the transpose of a given matrix.

Appointments or Meetings

```
#include <stdio.h>
```

```
#include <conio.h>
```

```
void main()
```

```
{
```

```
int a[10][10];
```

```
int i, j, r, c;
```

```
clrscr();
```

```
printf("Input the order of matrix");
```

```
scanf("%d %d", &r, &c);
```

```
for(i=0; i<r; i++)
```

```
for(j=0; j<c; j++)
```

```
{
```

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

```
}
```

```
for(i=0; i<r; i++)
```

```
for(j=0; j<c; j++)
```

```
{
```

```
printf("%3d", a[j][i]);
```

```
}
```

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

```
}
```

$$A = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$$

$$A' = \begin{bmatrix} 1 & 4 & 7 \\ 2 & 5 & 8 \\ 3 & 6 & 9 \end{bmatrix}$$