

Q. Write a program to perform matrix transpose a matrix from the user.

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

```
int main(){
```

```
    int ary1[2][2], ary2[2][2];
```

```
    int n = 2;
```

```
    for (int i = 0; i < n; i++){
```

```
        for (int j = 0; j < n; j++){
```

```
            printf("Enter a %dx%d for matrix-1: ",i,j);
```

```
            scanf("%d", &ary1[i][j]);
```

```
        }
```

```
    }
```

```
    for (int i = 0; i < n; i++){
```

```
        for (int j = 0; j < n; j++){
```

```
            ary2[j][i] = ary1[i][j];
```

```
        }
```

```
    }
```

```
    //-----
```

```
    printf("The transpose is:\n");
```

```
    for (int i = 0; i < n; i++){
```

```
        printf(" |");
```

```
    for (int j = 0; j < n; j++){  
        printf(" %d ", ary2[i][j]);  
    }  
    printf(" |");  
  
    printf("\n");  
}  
  
return 0;  
}
```