➢ **To print a Matrix spirally.**

>>> Syntax :

```c
#include<stdio.h>

int main(void)
{
        int A[10][10],size,start,end;
        printf("Enter the size of matrix : ");
        scanf("%d", &size);

        for(int i=0; i<size; i++)
                for(int j=0; j<size; j++)
                {
                        printf("Enter element at position [%d %d] : ",i,j);
                        scanf("%d", &A[i][j]);
                }
        for(int i=0; i<size; i++)
        {
                for(int j=0; j<size; j++)
                        printf("%4d", A[i][j]);
                printf("\n");
        }
        printf("\n\n");
        printf("\nOUTPUT ::");
        for(start=0,end=size-1; start<=end; start++,end--)
        {
                for(int i=start; i<=end; i++)
                        printf("%d ",A[start][i]);
                for(int i=start+1; i<=end; i++)
                        printf("%d ",A[i][end]);
                for(int i=end-1; i>=start; i--)
                        printf("%d ",A[end][i]);
                for(int i=end-1; i>=start+1; i--)
                        printf("%d ",A[i][start]);
        }printf("\n");
        return 0;
}
```

>>> Output :

```
khushal@khushal-HP-ProBook-445-G1:~/Desktop$ gcc spiral.c
khushal@khushal-HP-ProBook-445-G1:~/Desktop$ ./a.out
Enter the size of matrix : 4
Enter element at position [0 0] : 1
Enter element at position [0 1] : 2
Enter element at position [0 2] : 3
Enter element at position [0 3] : 4
Enter element at position [1 0] : 5
Enter element at position [1 1] : 6
Enter element at position [1 2] : 7
Enter element at position [1 3] : 8
Enter element at position [2 0] : 9
Enter element at position [2 1] : 10
Enter element at position [2 2] : 11
Enter element at position [2 3] : 12
Enter element at position [3 0] : 13
Enter element at position [3 1] : 14
Enter element at position [3 2] : 15
Enter element at position [3 3] : 16
    1    2    3    4
    5    6    7    8
    9   10   11   12
   13   14   15   16



OUTPUT ::1 2 3 4 8 12 16 15 14 13 9 5 6 7 11 10
khushal@khushal-HP-ProBook-445-G1:~/Desktop$
```