

```
1 // Final Lab 2557-1: Z
2 /// Note: this solution does not use array and faster than an array version.
3
4 #include <stdio.h>
5
6 int main() {
7     int N;
8     scanf("%d", &N);
9     int val = 0;
10    for(int i = 0; i < N; ++i) {
11        printf("%d ", val);
12        val = (val + 1) % 10;
13    }
14    printf("\n");
15
16    for(int row = 1; row < N - 1; ++row) {
17        for(int col = 0; col < N; ++col) {
18            if(col == N - row - 1) {
19                printf("%d\n", val);
20                val = (val + 1) % 10;
21                break;
22            } else
23                printf(" ");
24        }
25    }
26
27    for(int i = 0; i < N; ++i) {
28        printf("%d ", val);
29        val = (val + 1) % 10;
30    }
31 }
```