

```

1  /// Array Ring (with memory-saving method): Com Pro 1 Final Exam 2556-2
2  #include <stdio.h>
3
4  void main() {
5      int K;
6      scanf("%d", &K);
7
8      int center = K / 2;
9      int R[center];
10     for(int i = 0; i <= center; ++i)
11         R[i] = 0;
12
13     int x;
14     for(int row = 0; row < K; ++row) {
15         for(int col = 0; col < K; ++col) {
16             scanf("%d", &x);
17             int rowDiff = row - center;
18             int colDiff = col - center;
19             if(rowDiff < 0)
20                 rowDiff = -rowDiff;
21             if(colDiff < 0)
22                 colDiff = -colDiff;
23             if(colDiff > rowDiff)
24                 R[colDiff] += x;
25             else
26                 R[rowDiff] += x;
27         }
28     }
29
30     for(int i = 0; i <= center; ++i)
31         printf("%d\n", R[i]);
32 }

```