```
#include <stdio.h>

#define tw 2

__global__ void matadd(int *a, int *b, int *c,  int n){
      int ix = tw*blockIdx.x +threadIdx.x;
      int iy = tw*blockIdx.y + threadIdx.y;
      int idx = iy*n+ix;
      if(idx<n*n)
            c[idx]=a[idx]+b[idx];
}

int main(void) {
      int n;
      scanf("%d",&n);
      int a[n][n];
      int b[n][n];
      int c[n][n];
      for(int i=0; i<n; i++){
            for(int j=0; j<n; j++){
                  scanf("%d",&a[i][j]);
            }
      }
      for(int i=0; i<n; i++){
            for(int j=0; j<n; j++){
                  scanf("%d",&b[i][j]);
            }
      }

      int *a_d, *b_d, *c_d;

      cudaMalloc((void **)&a_d, n*n*sizeof(int));
      cudaMalloc((void **)&b_d, n*n*sizeof(int));
      cudaMalloc((void **)&c_d, n*n*sizeof(int));
      cudaMemcpy(a_d, a, n*n*sizeof(int), cudaMemcpyHostToDevice);
      cudaMemcpy(b_d, b, n*n*sizeof(int), cudaMemcpyHostToDevice);

      dim3 dimGrid(n/2,n/2,1);
      dim3 dimBlock(tw,tw,1);

      matadd<<<dimGrid,dimBlock>>>(a_d,b_d,c_d,n);

      cudaMemcpy(c,c_d,n*n*sizeof(int),cudaMemcpyDeviceToHost);

      for(int i=0; i<n; i++)
            printf("%d ",&c[i]);
      printf("\n");

      return 0;
}
```