```
#include<stdio.h>
#include<stdlib.h>
__global__ void srt(int* a, int n){

int idx=threadIdx.x;

for(int i=0; i<n-1; i++){

      if(i%2==0 and idx%2==0 and idx+1<n){
            if(a[idx]>a[idx+1]){
            int t=a[idx];
            a[idx]=a[idx+1];
            a[idx+1]=t;
            }
      }
      else if(i%2==1 and idx%2==1 and idx+1<n){
            if(a[idx]>a[idx+1]){
            int t=a[idx];
            a[idx]=a[idx+1];
            a[idx+1]=t;
            }
      }
}

}

int main()
{
int n;
scanf("%d",&n);
int *a_h;
a_h=(int*)malloc(n*sizeof(int));
for(int i=0; i<n; i++)
      a_h[i]=rand()%1000;
printf("Unsorted:\n");
for(int i=0; i<n; i++)
      printf("%d ",a_h[i]);

printf("\n");

int *a_d;

cudaMalloc((void**)&a_d,n*sizeof(int));
cudaMemcpy(a_d,a_h,n*sizeof(int),cudaMemcpyHostToDevice);

dim3 blockdim=n;
dim3 griddim=1;

srt<<<griddim,blockdim>>>(a_d,n);

cudaMemcpy(a_h,a_d,n*sizeof(int),cudaMemcpyDeviceToHost);
printf("sorted\n");
for(int i=0; i<n; i++)
      printf("%d ",a_h[i]);

}
```