

```

__global__ void work_inefficient_scan_kernel(float *X, float *Y,
int InputSize) {

__shared__ float XY[SECTION_SIZE];

int i = blockIdx.x*blockDim.x + threadIdx.x;
if (i < InputSize) {
    XY[threadIdx.x] = X[i];
}

// the code below performs iterative scan on XY
for (unsigned int stride = 1; stride <= threadIdx.x; stride *= 2) {
    __syncthreads();
    XY[threadIdx.x] += XY[threadIdx.x-stride];
}

Y[i] = XY[threadIdx.x];
}

```