Debugging (printing) inside kernels

1. include these 2 files (attached) in your main program
#include "cuPrintf.cu"
#include "cuPrintf.cuh"

2. Before and after your kernel calls

cudaPrintfInit ();

dim3 dimGrid1();
dim3 dimBlock1();
kernel_1<<<dimGrid1, dimBlock1>>>(input1, output1);

dim3 dimGrid2();
dim3 dimBlock2();
kernel_2<<<dimGrid2, dimBlock2>>>(input2, output2);
...

cudaPrintfDisplay (stdout, true);
cudaPrintfEnd ();

3. Now use cuPrintf in your kernel program

__global__ void kernel_1 {
...
cuPrintf("%f \n", a[i]);
...
}

4. It will print out block# and thread# for you:

[block#, thread#]: value
[0, 0]: -1.706354
[0, 1]: 0.876147
[0, 2]: -0.559823
[0, 3]: 1.583693
[1, 0]: -0.521185
[1, 1]: 1.715880
[1, 2]: -1.153950
[1, 3]: 1.352511