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
```