## CS/EE 217 Lab 4 Histogram

## Due Monday Nov. 30, 2015

(Extra credit: 15% towards midterm)

- 1) Unzip lab6-starter into your SDK projects directory or working Linux directory
- 2) Examine the source files kernel.cu and main.cu and complete the functionality of the histogram kernel.
- 4) The program takes two arguments, m (number of elements) and n (number of bins). The default values are 1million and 4096.
- 5) Answer the following questions:
- a-Use visual profiler to report relevant statistics about the execution of your kernels. Did you find any surprising results?
- b- What, if any, limitations are there on m and n for your implementation? Explain these limitations and how you may overcome them with a different implementation.

Grading:

Your submission will be graded on the following aspects.

Correctness (60%)

1. Histogramming works for a range of m and n values.

Efficiency (20%)

• Efficient/Effective implementation is used in both cases.

Report (20%)

Answers to the questions above