

CS/EE 217
Lab 3
Histogram
Due Wednesday May 9 at 11:59:59pm

- 1) Unzip lab3-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 1 million and 4096.
- 5) Answer the following questions:
 - a. Use visual profiler to report relevant statistics (e.g. utilization and memory hierarchy related) 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:

Please upload your zipped directory (after cleaning up executables and any unnecessary files) to iLearn. 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