CUDA Lab Programs

1. Write a program in CUDA to add two vectors of length N using
   a) block size as N b) N threads

2. Implement a CUDA program to add two vectors of length N by keeping the number of threads per block as 256 (constant) and vary the number of blocks to handle N elements

3. Write a program in CUDA which performs convolution operation on one dimensional input array N of size *width* using a mask array M of size *mask_width* to produce the resultant one-dimensional array P of size *width*

4. Write a program in CUDA to process a ID array containing angles in radians to generate sine of the angles in the output array. Use appropriate function