Project Proposal

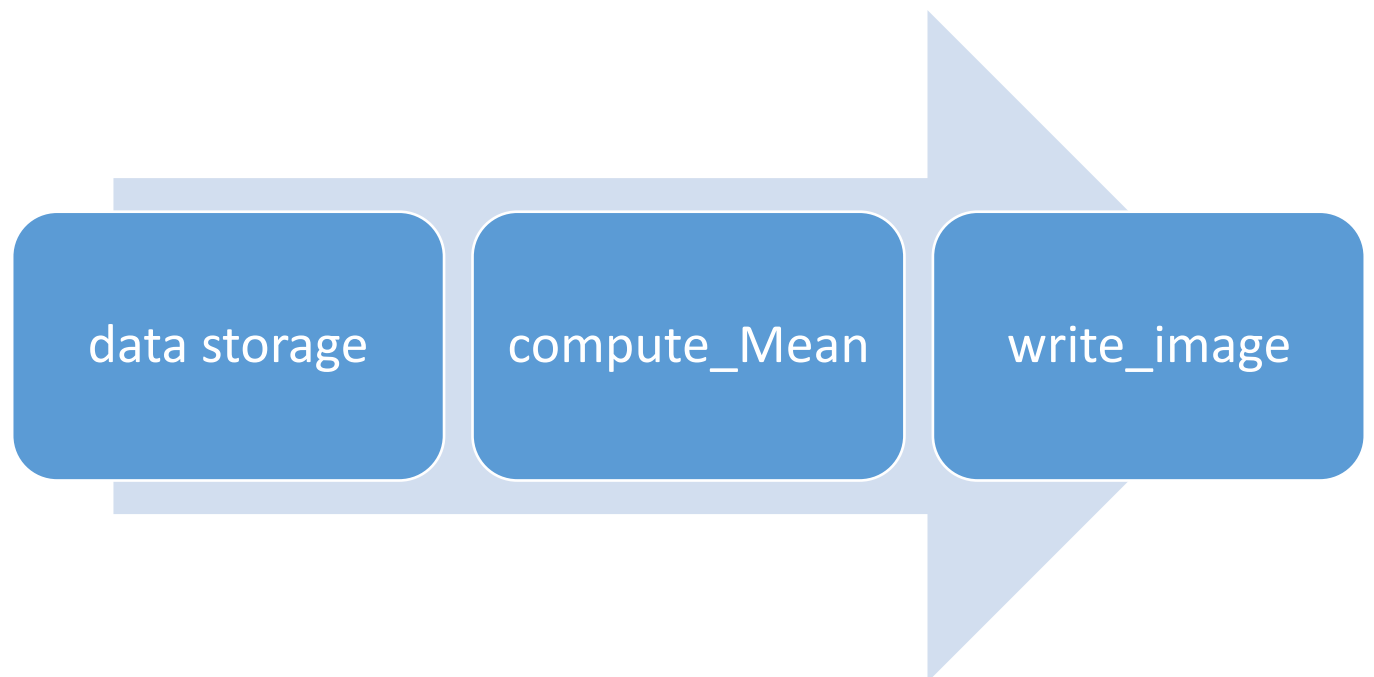**Shiva Rama Krishna Reddy Velma.**

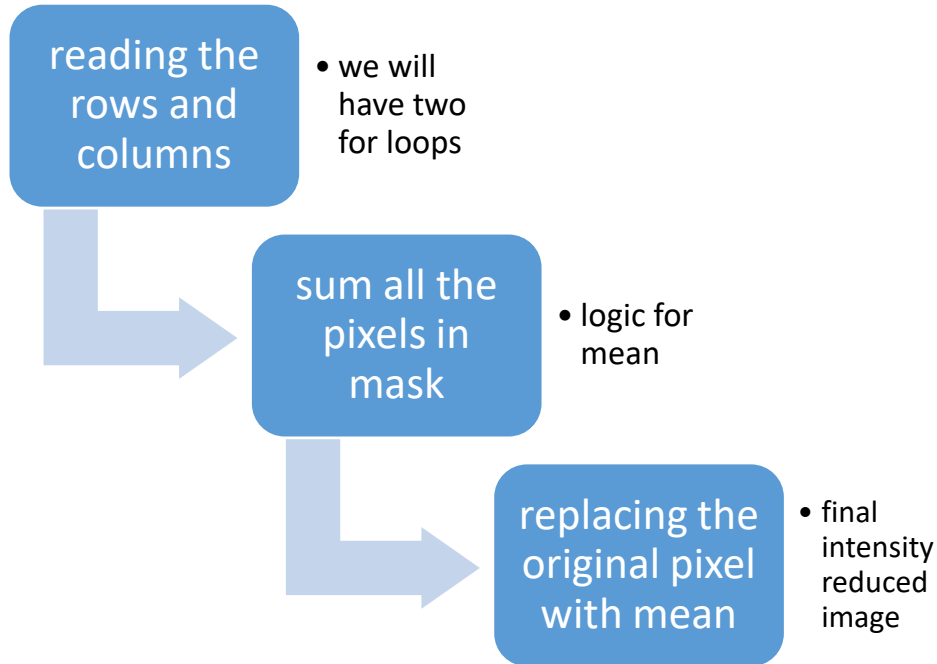**KUID# 2842942**

Project Description:

I'm Planning to implement **Average Mean Filter algorithm.** It is used for smoothing of images i.e. reducing the amount of intensity between pixels. The main idea is to replace each pixel value with the mean value of its neighbor pixels. Pixels that are included in the averaging operation are specified by the mask. The larger the mask becomes the more blurring of image takes place.

$Mean(A) = 1/N^2 \; \Sigma \; A \; (x+ i, y+j)$

Block Diagram:

Compute Function:

reading the rows and columns
- we will have two for loops

sum all the pixels in mask
- logic for mean

replacing the original pixel with mean
- final intensity reduced image

Will try to make this application as parallel as I could.

References:

1. Rafael C. Gonzalez and Richard E. Woods, *Digital Image Processing*. Addison-Wesley, 1992.
2. William K. Pratt, *Digital Image Processing*. Wiley, 1991.
3. http://www.librow.com/articles/article-5