RO-1.0X

Assignment 6
Image Smoothing and Edge Preservation

Problem Statement:

- **Given files are**
  - "**assignment_6.jpg"**

- **Tasks**
  - Implement Bilateral filter Algorithm from scratch.

- **To Submit**
  - **"output.jpg"**
    - Output image after applying Bilateral Filter.
  - **"bf_image_smoothing.py", "main.py"**
    - Create a class based implementation in ***"bf_image_smoothing.py"*** and call each operation in ***"main.py".***
  - **"std_spatial.txt"** and **"std_color.txt"**
    - Standard deviation for used for **Spatial function** and Standard deviation used for **Range function**.
  - **"filter_size.txt"**
    - Filter size used in estimating **Spatial** weights and **Range** weights.
  - **"output_cv.jpg"**
    - Output image obtained from OpenCV function with same parameters.
  - *Observe the results from OpenCV function and your own implementation, as in upcoming assignments you'll have to use OpenCV functions.*

- To submit the assignment put both the files in a folder named **username**, where **username** is your user name with which you signed up at DeepEigen.
  - Submit **username.zip** file