RO-1.0X

Assignment 4
Image Smoothing

Problem Statement:

- **Given files are**
  - “**assignment4_1.jpg”** and **“assignment4_2.jpg”**
    - Images with an induced noise.
  - **“coords_1.txt”** and **“coords_2.txt”**
    - 50% of the noise induced coordinates and their original values.

- **Tasks**
  - Figure out the distribution of the noise induced in the given image.
  - Apply appropriate Image Smoothing technique to remove noise from the image.

- **To Submit**
  - **“answer1.txt” , “explaination1.pdf”** and **“answer2.txt” , “explaination2.pdf”**
    - Text file contains the correct option for noise from the following options:
      - 1. Gaussian Noise
      - 2. Salt and Pepper Noise
      - 3. None of the above
        - *if the option 3 is correct, in explaination also give the name of distribution of the noise that you think is present in the image.*
      - **Explaination** file contains the explanation [plots, etc...] for the conclusion of noise distribution and also the applicable smoothing method to filter that noise.
  - **“[method]_img_1.jpg”** and **“[method]_img_2.jpg”**
    - Output from applying the appropriate smoothing method. {for eg: gaussian_img_1.jpg}

- 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