HARRIS CORNER DETECTION

You have to submit a report of Harris corner detection.

- 1. Show images of $I_x \ I_{y,} I_{x,}^2 I_{y,}^2$ and $I_x I_y$
- 2. Show image of R matrix, before and after non-maximum suppression
- 3. Overlay corners over the image (use the red-plus signs for overlaying)

| | lmg1 | lmg2 | lmg3 |
|-----------------------------------|------|------|------|
| Size of images | | | |
| | | | |
| | | | |
| I_xI_y | | | |
| R | | | |
| R (after non-maximum suppression) | | | |
| Corners overlayed | | | |
| Th-1 | | | |
| Th-2 | | | |
| size of R matrix | | | |

Analysis:

| Neighborhood size for computing R | Size-1 {corresponding variance} | Size-2 | Size-3 |
|-----------------------------------|---------------------------------------|--------|--------|
| Img-1 {Corners overlayed} | | | |
| Img-2 | | | |
| Img-3 | | | |

Analysis:

- 1. Which variance works better for which image, and why?
- 2. How did you handle the boundary condition for convolution?
- 3. Is your R matrix of the same size as image I?
- 4. If not then how do you recover the correct location of the corners?

Note: Do not take screenshots, please save images properly and then add them in the report (and separately too).