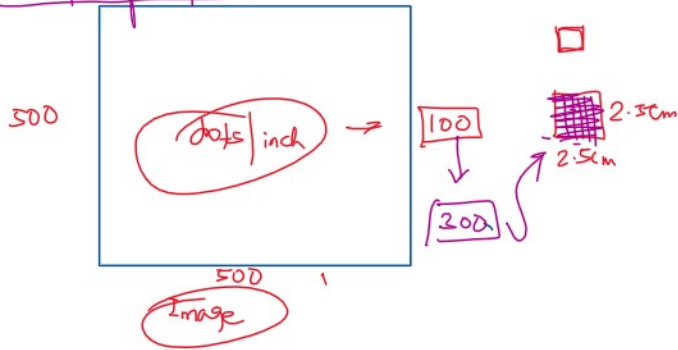


At midnight, Indians crashed WhatsApp for 1 hour with Happy New Year messages

While you were busy celebrating the coming of 2018, WhatsApp stopped working for a lot of people around the world, including India, as it suffered a server issue.

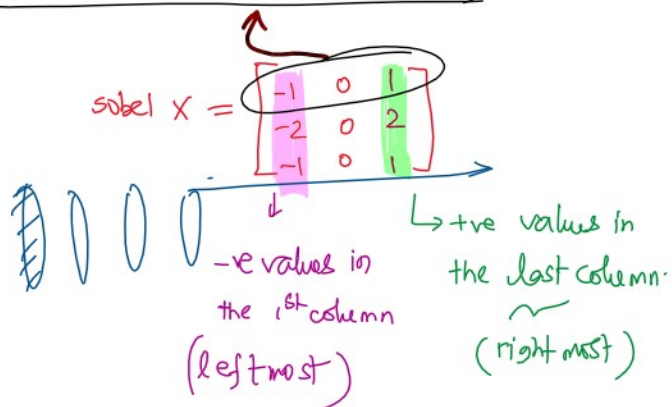
concept of dpi

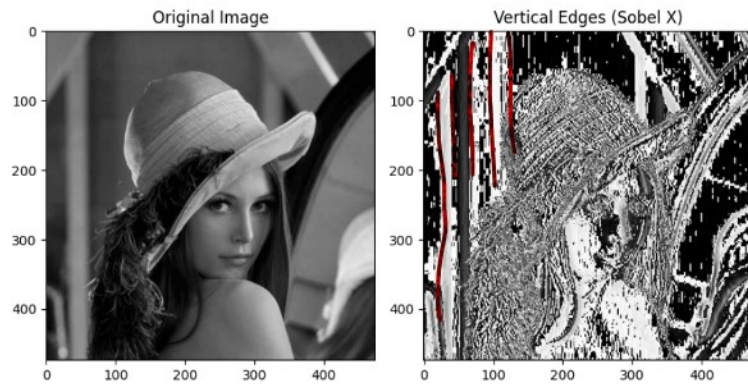


Sobel Filters for edge detection

- it is one of the most commonly used filters for edge detection.
- it works by calculating the gradient (rate of change) of the image intensity in a specific direction (horizontal or vertical)

Sobel X (vertical edge detection):





Sobel: Horizontal edge detection

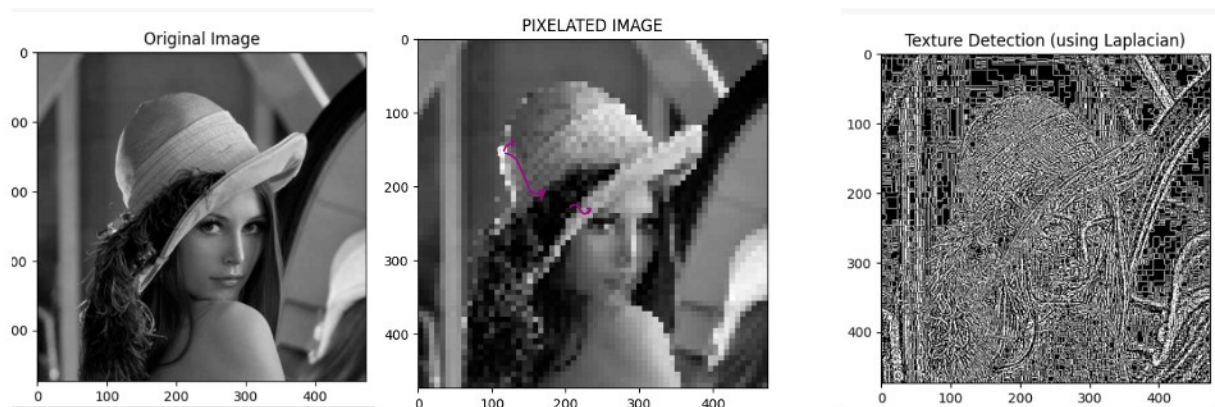
Sobel $\mathbf{Y} = \begin{bmatrix} -1 & -2 & -1 \\ 0 & 0 & 0 \\ 1 & 2 & 1 \end{bmatrix}$

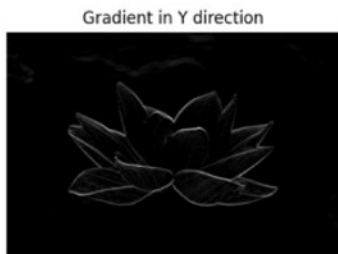
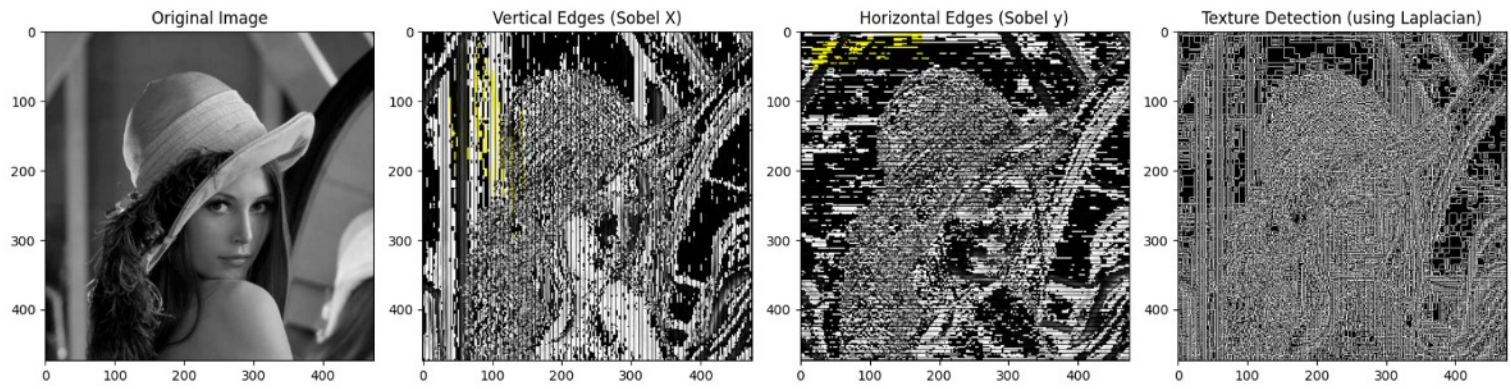
↓
detects the horizontal edges

y
↓
Top
Bottom

Laplacian Filter for texture detection

- it is used to detect textures and other fine details by measuring the rate of change in pixel intensity over the entire range.





edges

