



Q1. Explain two functions related to forming an RGB image from its components and viewing an RGB color space. Clarify the calling syntax and the arguments of each of them.

Q2. Define the functions related to the following tasks:

- a) Generating a binary image from a gray-scale intensity image.
- b) Generating gray-scale intensity image from an RGB image.

Q3. Explain the following functions related to intensity transformation:

- a) `imadjust`
- b) `intrans`
- c) `gscale`

Clarify the arguments and give an example of each function.

Q4. Explain the following functions related to color transformation:

- a) `interp1q`
- b) `spline`
- c) `gscale`

Clarify the arguments and give an example of each function.

Q5. Show how to apply spatial filtering on color images, specifying related function and procedure

Q6. Mention applications in which processes based on individual color planes are not equivalent to working directly in RGB vector space

Q7. Explain the concept of dilation operation and show how it is implemented in Matlab environment. Provide the related function, its input and output.

Q8. Explain the concept of erosion operation and show how it is implemented in Matlab environment. Provide the related function, its input and output.