Pseudo-Colour Image Processing

Meghana R
A25248100

Introduction

- A **pseudo-color** image is derived from a grayscale image by mapping each intensity value to a color according to a table or function.
- Pseudo color is typically used when a single channel of data is available like
  - temperature
  - elevation, soil composition,
  - tissue type,

in contrast to false color which is commonly used to display three channels of data.

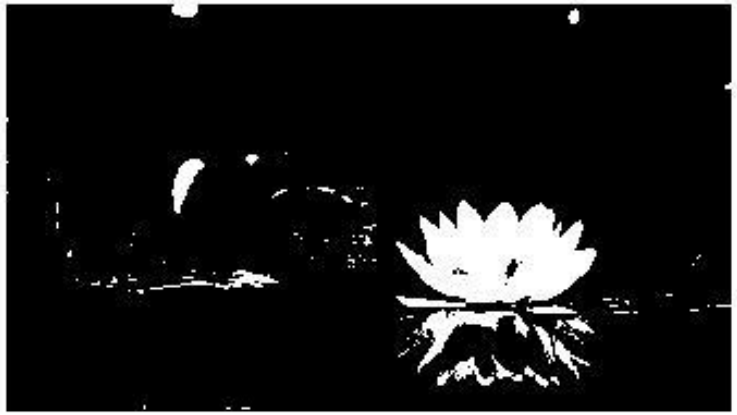
- The term pseudo or false colour is used to differentiate the process of assigning colours to monochrome images from the processes associated with true colour images.

Objectives

- Implement a RGB image, specify a range of grey-level value for the input image and program will output an RGB image whose pixels have a specified colour corresponding to one range of grey levels in the input image, and the remaining pixels in the RGB image are same as original image.

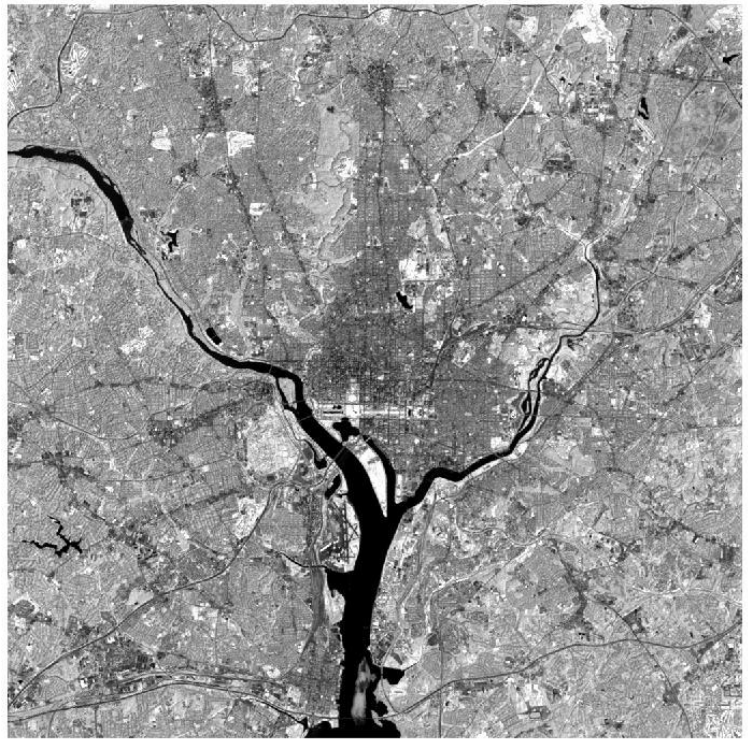
- Download the image in Fig. 1.10(4) from the book web site and process it with the written program so that the river appears yellow and the rest of the pixels are the same shades of grey as in the input image.

Result 1

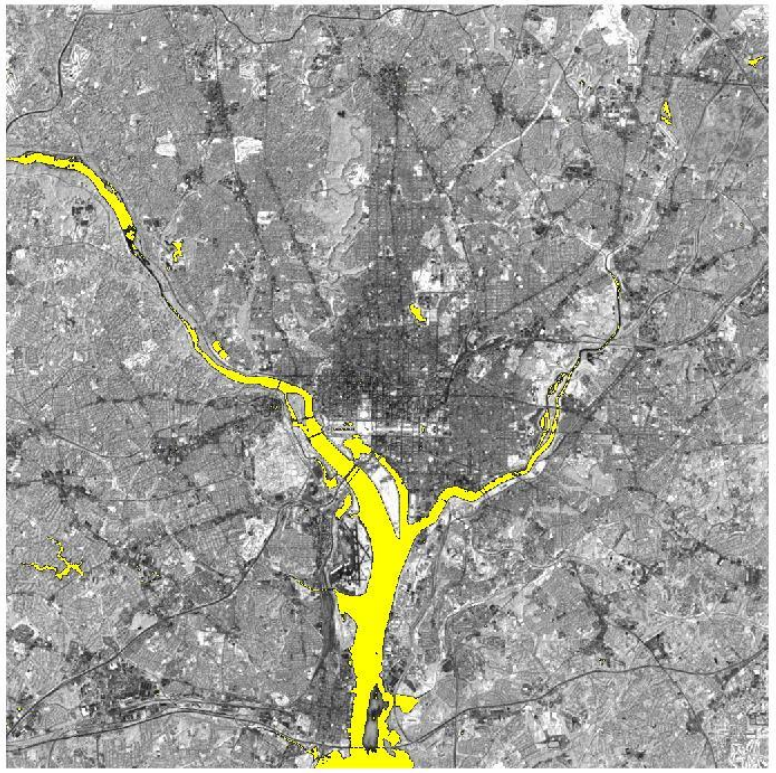


Result 2

Original image



Result image



References

- http://www.imageprocessingplace.com/DIP-3E/dip3e_student_projects.htm#06-02
- digital image processing 3rd edition, Rafael C. Gonzalez and Richard E. Woods
- https://www.mathworks.com

THANK YOU