Answer

Yokoi connectivity number

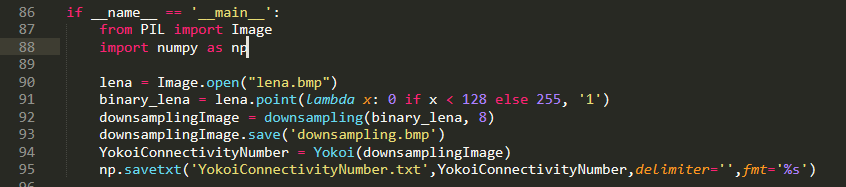


Description

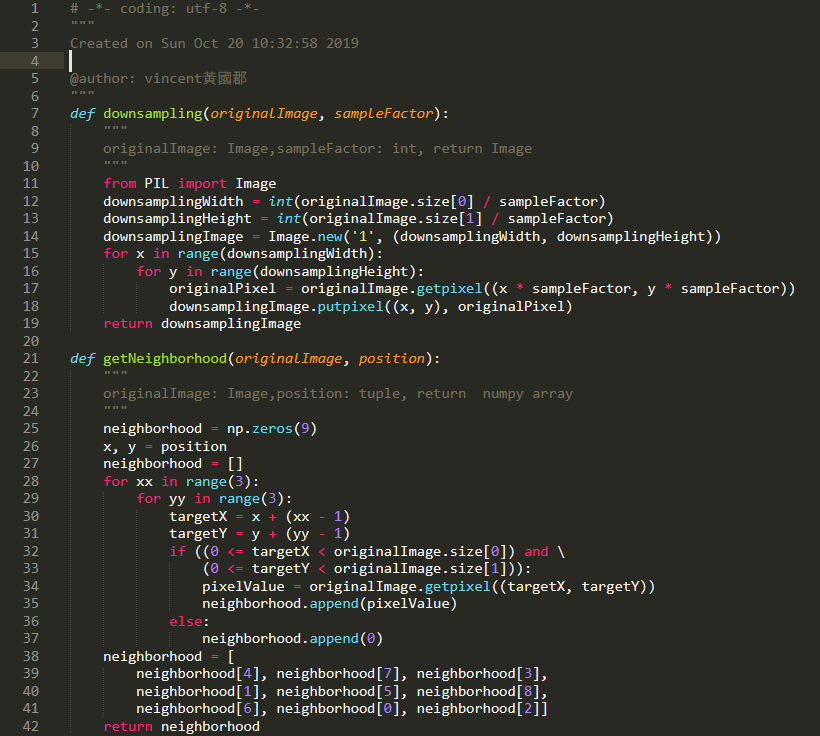
1. Problem Formation
   1. Binarize the benchmark image Lena as in HW2 by 128
   2. using 8x8 blocks as a unit, take the topmost-left pixel as the down-sampled data, Down-sample Lena from 512x512 to 64x64
   3. Count the Yokoi connectivity number
   4. Result of this assignment is a 64x64 matrix. Please **align** the matrix within 1 single A4 page (using 4-connected).
2. Method of Algorithms

For 4-connectivity:

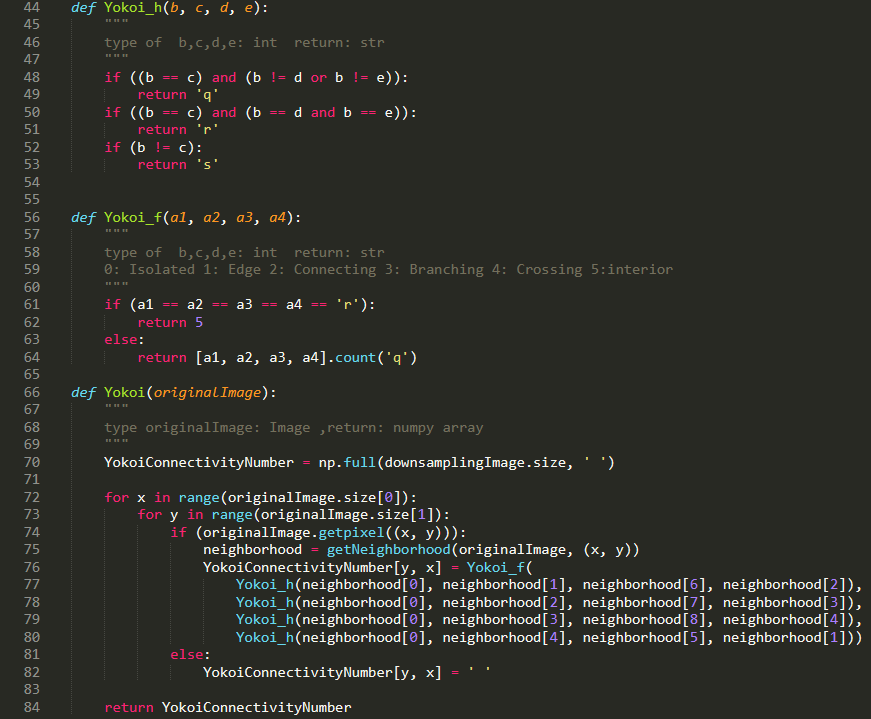
1. 本次作業使用python, IDE為Spyder
2. Source Code [HW6.py]說明如下

**主程式**:

1. 先import會用到的library
2. 將lena圖讀進來
3. 進行binary 處理
4. 進行downsample, 8個取一個值
5. 進行yokoi 演算法
6. 最後將結果存為txt檔



1. 將每一個pixel 值附近的九宮個取出
2. 重新排列成yokoi會用到的九宮格順序
3. 先import會用到的library
4. 取出sample後的大小
5. 建立新的output影像大小格式
6. 每sampleFactor的距離，將pixel取出來，放到output



進行yokoi 運算，對每一個pixel進行f(h1(a,b,c,d), h2(a,b,c,d)………)

最後回傳array