**1 Restate the Basic Global Thresholding (BGT) algorithm so that it uses the histogram of an image instead of the image itself.**   
(Hint: Please refer to the statement of OSTU algorithm)  
  
**2 Give an explanation why the initial threshold in the Basic Global Thresholding (BGT) algorithm must be between the minimum and maximum values in the image.**   
(Hint: Construct an example that shows the algorithm failing for a threshold value selected outside this range.)  
  
**3 Design an algorithm with the function of locally adaptive thresholding (e.g. based on moving average or local OSTU); implement the algorithm and test it on exemplar image(s).**  
  
**4** 编程实现线性插值算法（不能调用某个算法库里面的插值函数），并应用：读出一幅图像，利用线性插值把图片空间分辨率放大N倍，然后保存图片。