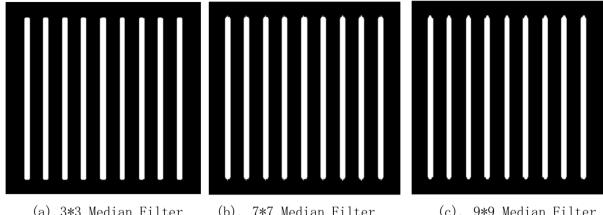
## 5.6: Median filter



(a).3\*3 Median Filter

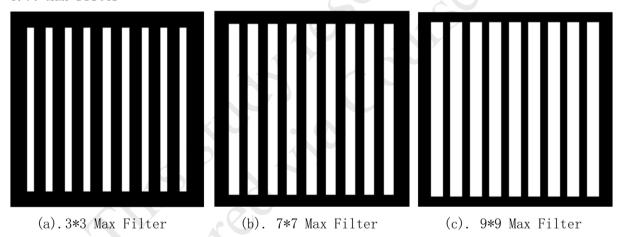
(b). 7\*7 Median Filter

(c). 9\*9 Median Filter

After using the median filter, the bar will still be 7 pixels wide, but the top and bottom of the bar will not be 90 degree anymore. When the size of median filter becomes larger, the corner of the bar will be sharper. But the color of the filtered image will still only contain values 10 and 240, since it takes the median.



5.7: Max filter



When the size of max filter gets larger, the bar will become wider, since the bar is 240, which is bigger than the background with value 10. So (a) is 9 pixels wide and 212 pixels high, (b) is 13 pixels wide and 216 pixels high, (c) is 15 pixels wide and 218 pixels high. The corner will still be 90 degree.