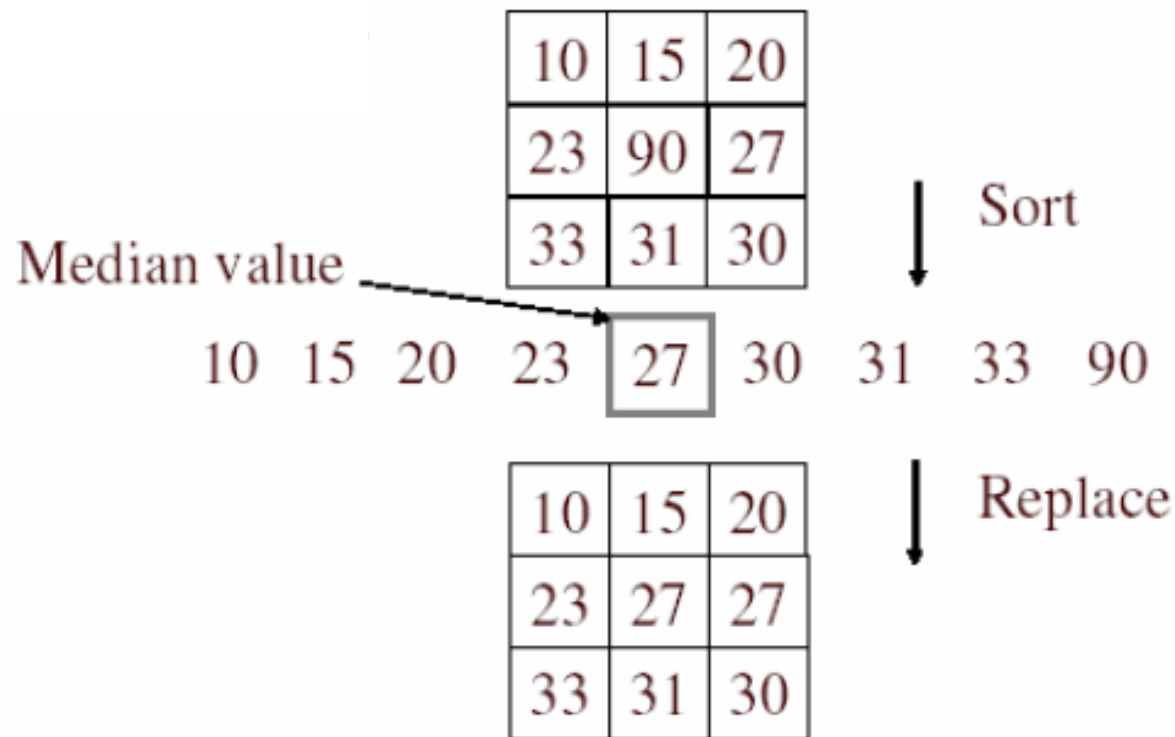


Alternative idea: Median filtering

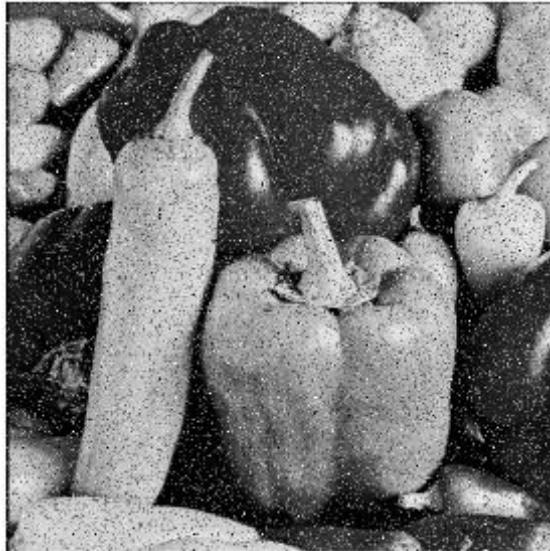
- A **median filter** operates over a window by selecting the median intensity in the window



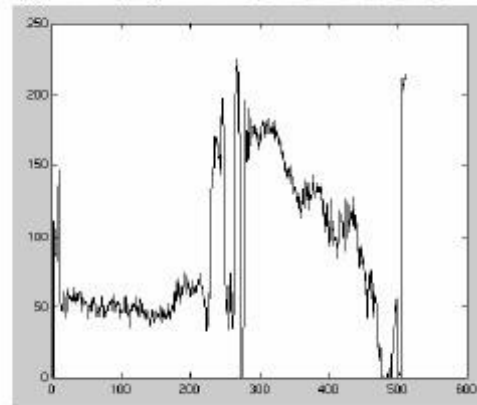
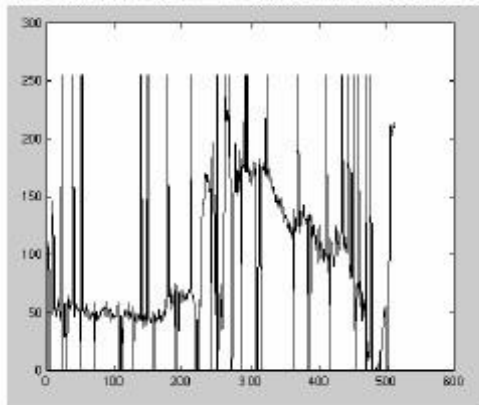
- Is median filtering linear?

Median filter

Salt-and-pepper noise



Median filtered



Other non-linear filters

- Weighted median (pixels further from center count less)
- Clipped mean (average, ignoring few brightest and darkest pixels)
- Bilateral filtering (weight by spatial distance *and* intensity difference)



Bilateral filtering