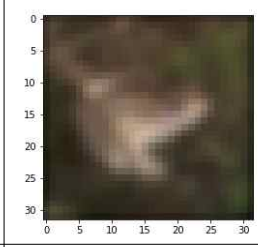
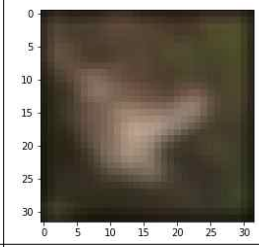
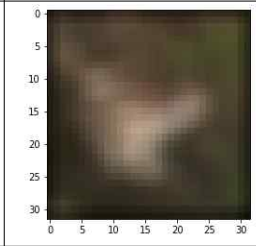
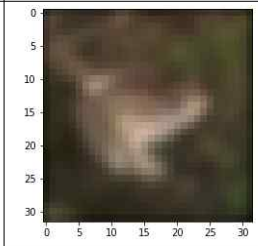
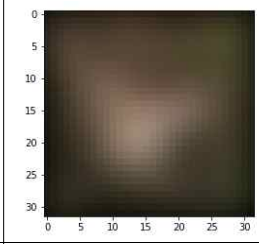
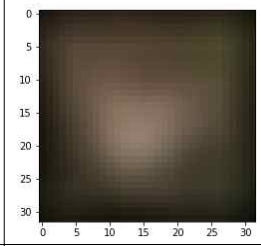
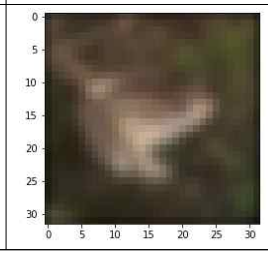
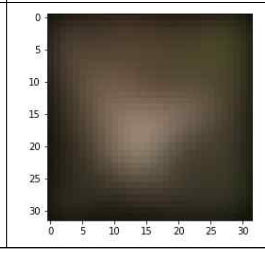
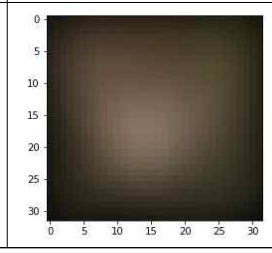
Homework#1

2015004302 곽상원

▷ Source image

▶ Output

	δ=1	δ=3	δ=5
m=5			
m=11			
m=15			

▶ Analysis

가우시안 필터는 중심의 기준으로 불균일하게 에너지를 퍼뜨리는 필터이다 보니 기본적으로 smoothing의 효과를 보인다. 필터의 크기는 얼마나 넓은 영역까지 퍼뜨릴지, 표준편차는 중심과 주변의 에너지를 얼마나 균등하게 퍼뜨릴지를 결정하는 요소이다. 위의 실험결과, 필터의 크기(m)와 표준편차(δ)가 커질수록 output image는 더욱 blurred 해짐을 확인할 수 있었다.