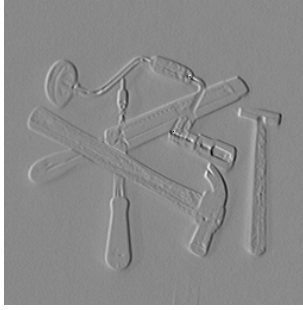# DD2423
Lab II
Alexandros Filotheou
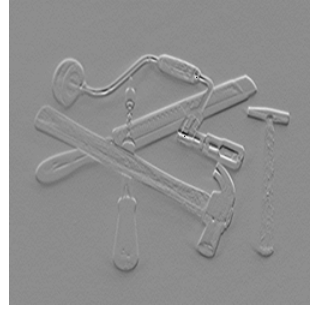
1 Difference operators
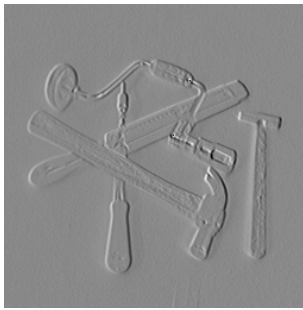
1.1 Question 1

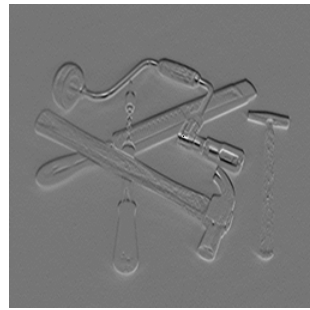Figure 1: Image `few256`.

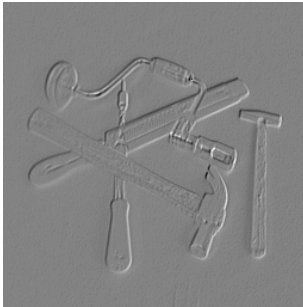SDO: X-wise derivative

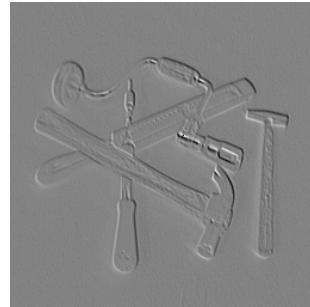SDO: Y-wise derivative

CDO: X-wise derivative
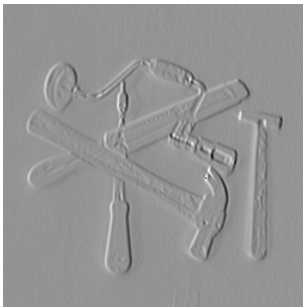
CDO: Y-wise derivative

Roberts: X-wise derivative

Roberts: Y-wise derivative

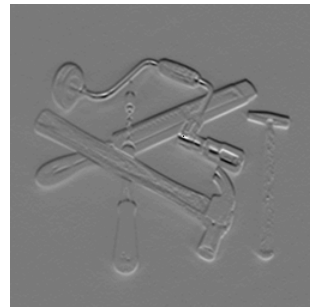Sobel: X-wise derivative

Sobel: Y-wise derivative

Figure 2: Derivatives of image `few256` in the x and y directions. The simple differences operator is featured in the first row, the central differences operator in the second, the Roberts cross operator in the third and the Sobel operator in the fourth.

image	size_x	size_y
few256	256	256
SDO(few256)	256	254
CDO(few256)	256	254
Roberts(few256)	255	255
Sobel(few256)	254	254

Table 1: Image sizes for the origin image and the images of derivatives in the x-wise direction.

image	size_x	size_y
few256	256	256
SDO(few256)	254	256
CDO(few256)	254	256
Roberts(few256)	255	255
Sobel(few256)	254	254

Table 2: Image sizes for the origin image and the images of derivatives in the y-wise direction.