**Report**

**Implementation:**

For implementing the code I have made two functions, one for convolution and one for hysteresis thresholding, as I felt it easier to use them if they were a function.

convolution2d:

It takes two inputs, one is the image and one is the filter to be applied on it. It firstly flips the filter then iteratively applies it on the image, multiplying the filters onto the pixels and putting its sum in the middle pixel.

hysteresis:

This function takes 3 inputs, the image to be processed, the Tl value and the Th value. It then iterates on every pixel checking if its value is equal to or over Th, if it is, then it’s made an edge, then all it’s neighbours are checked to see if their value is equal to or over Tl, if they are then they are made an edge too.

I felt that, for my code, the best Tl and Th value was 5 and 10, or 5 and 20, respectively.