THIS PAPER IS BASICALLY USELESS NOW GODDAMN IT

2. c)(i)

def is\_local\_maximum(x, y, z, mat):

for i in range(x-1, x+1):

for j in range(y-1, y+1):

for k in range(z-1, z+1):

if i /= x and j /= y and k /=z and mat[i, j, k] >= mat[x, y, z]:

return False

return True

# Initialize all buckets to zero

H = zeroes(256, 256, 50)

for pixel in image:

for a in range(0, 256):

for b in range(0, 256):

r = sqrt((pixel.x - a)\*\*2 + (pixel.y - b)\*\*2)

H[a, b, r] += 1

# Find local maxima

for a in range(256):

for b in range(256):

for r in range(50):

if is\_local\_maxima(a, b, r, h):

# print x, y co-ordinates of centres of circles and the radius r

print("x = ", a, ", y = ", b, ", r = ", r)