

Report for Question 1

Files Included

1. myMainScript.m
2. myShrinkImageByFactorD.m
3. myBilinearInterpolation.m
4. myNearestNeighborInterpolation.m

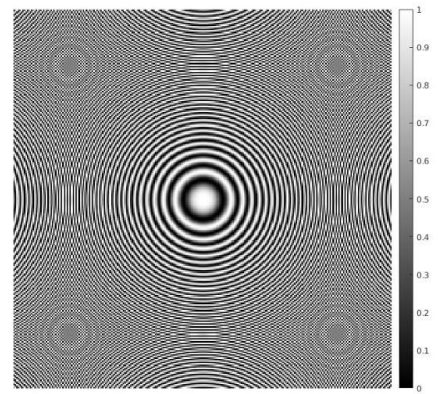
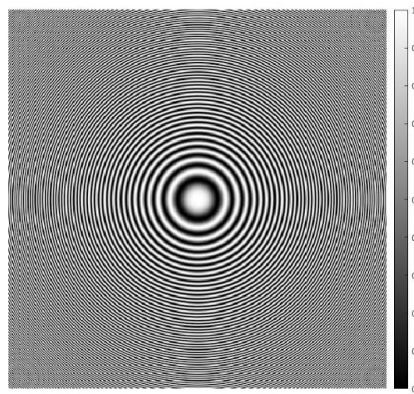
How to Run

Run myMainScript.m file from matlab.

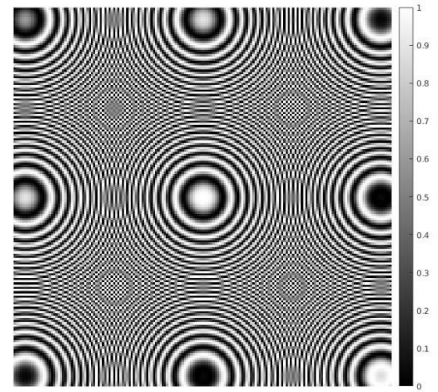
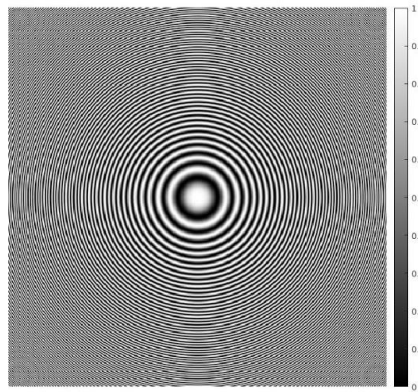
Output

4 images will be created with following figure titles

- Shrunk Image D=2



- Shrunk Image $D=3$



- Nearest Neighbourhood Interpolation



- Bilinear Interpolation



Conclusion

- (a) Moire effect is larger for $d = 3$ than $d = 2$.
- (b) Bilinear interpolation results slightly blurred image, but pixel values are continuous.
- (c) Nearest-Neighbour interpolation results in discrete pixel intensities.