## REPORT

I faced a lot of challenges in this assignment. Safe to say it was very hard and frustrating that I gave up many times. But I tried my best to all questions. So following are the few errors I faced (couldn't take screenshots of all of them):

- question 4 itself was not that difficult. The only problem I faced was converting an rlc file into an image.pgm file. So to solve this problem, I first read the rlc file and created a 2d dynamic array filling it with the pixels of white (1). Then I filled the array with 0's at places where the rlc gives the black pixel position.
- In question 5, the implementation
  was not that easy. Although I
  successfully made the quad tree, but
  the idea of keep repeating the
  process till we get only black pixels
  and white pixels was difficult to

Manahil Kamran 21i-2668 DS-N

> implement. I did as much as I could and since now the deadline has arrived, I can't do further. However, my code can definitely work once I fix my errors.

- Question 6 was again easy but the four-digit folding method was a bit tricky part which took some effort and time. The only problem was accessing the image files given in the data set. However, I fixed that by extracting it in the same folder as my project and importing the images on my vs studio. Since the names were similar, I generated them as strings and easily accessed them. As they were in P2 format, so I changed my program to work for both P2 and P5 format files.
- There were many times when my code exited with code zero (exception error). But I fixed them after noticing some small silly mistakes. However, it does take a lot of time to fix since you can't exactly tell where the problem is.