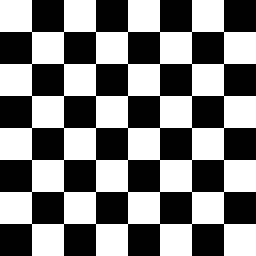
Q1 - OpenCV:

Assume that the following file, named ‘image.jpg’, is being read and manipulated by the following program. Get the final output of the program.

P.S: Each small square has the dimensions of 32x32 pixels





256 pixels

256 pixels

Q2:

Create a computer vision program that finds a sticky-note in a webcam feed, draws a rectangle around the object of interest, and finds the distance form the center of the sticky-note to the camera and shows it in the feed. The following shows an example output:



Expected output of the program

Sample from webcam feed

Q.3:

Design a URDF file for Universal robot (UR5e) and also a simulation model with basic movement in gazebo.