# CMPE1300 – Exercise 10 for loop

For Loop – Checkerboard Draw

In this ICA you will use the for loop to draw a checkerboard in the GDIDrawer. When the program starts, ask the user to input the size of the square in pixels. The value accepted from the user will be checked in a loop, and must be a valid integer in the range of 10 to 200. The user will be trapped in the loop until a valid square size has been entered. The square size **must** be evenly divisible into the size of the GDIDrawer window (600 and 800). The remainder of dividing the GDIDrawer window size by the square size should be zero.
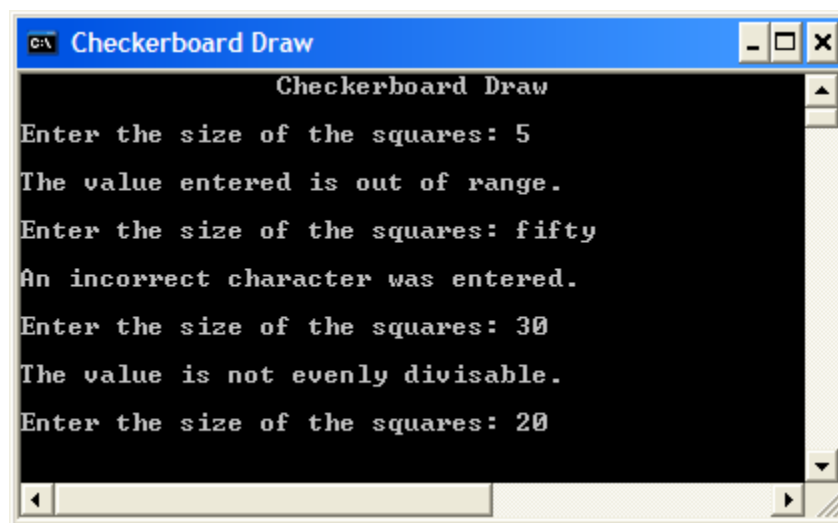
Once the size of the squares has been entered correctly, the program will draw the checkerboard pattern using a combination of **for loops**, using the size that the user entered for each square. The program will fill the drawing window, as shown below.

Checkerboard Draw

Enter the size of the squares: 200

GDI+ Drawer V1.0 - Render Time = 11.04ms (12 shapes)
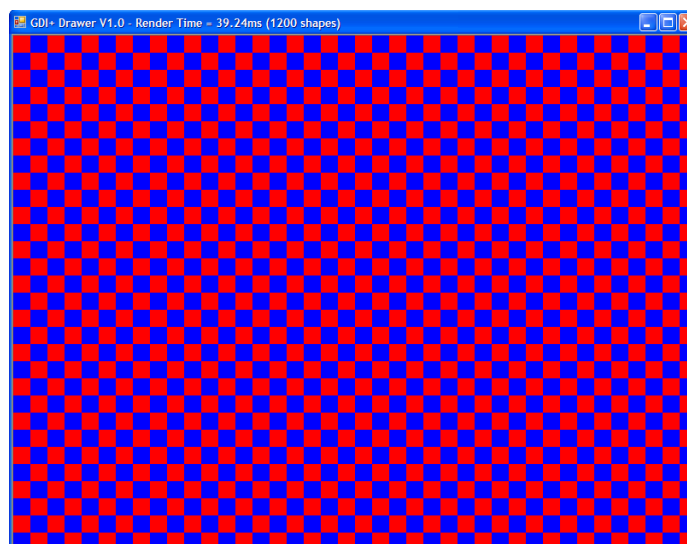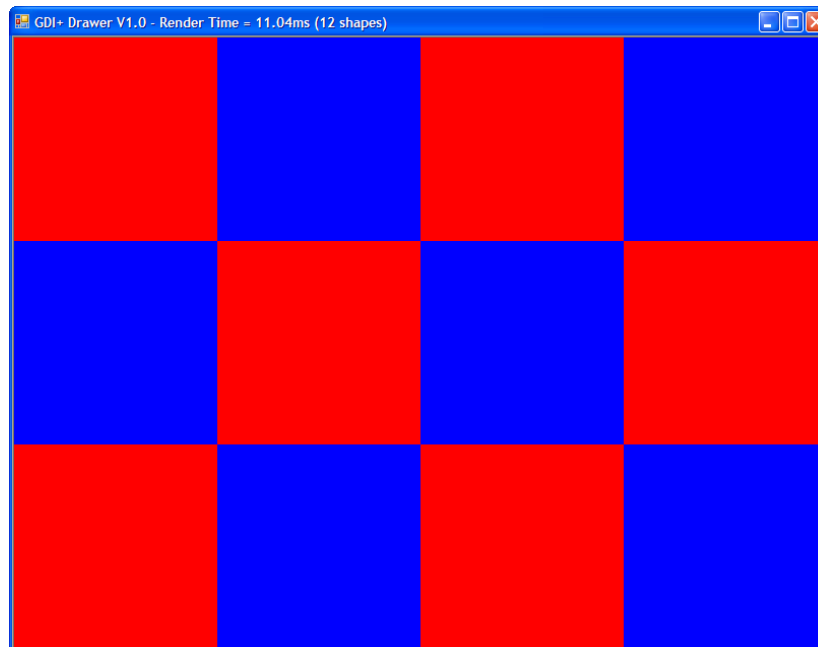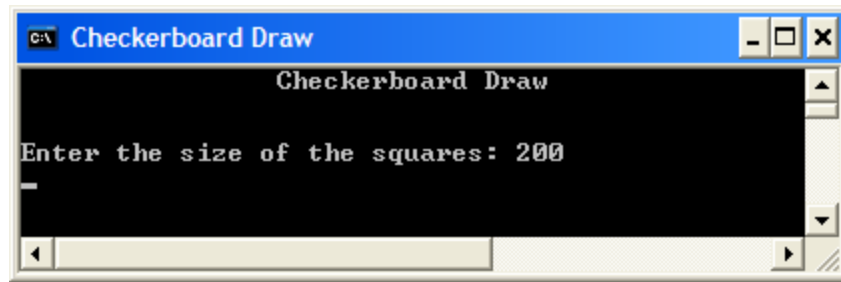
HINT: Use the remainder operator (%) to determine if the square size is evenly divisible into 800 and 600. Set the scale of the drawing window to the square size. Draw a checkerboard by using the remainder operator to determine if the x and y location is even or odd (x % 2 == 0 indicates even, x % 2 == 1 indicates odd), and switch the drawing colors.