Part 0: The time spent is :0.199540.

Part 1:

a. This loop cannot be parallelized. There is a loop dependency.
b. This loop cannot be parallelized. There is a loop dependency.
c. This loop cannot be parallelized. There is a race condition.
d. This loop can be parallelized.
e. for (row = 0; row < n; row ++)
        x[row] = b[row];
    for (col = n -1; col >= 0; col--) {
        x[col] /= A[col][col];
        #pragma omp single
        for (row = 0; row < col; row ++)
            x[row] -=A[row][col]*x[col];
    }
f. The time spent for serial code is :0.199540
    The time spent for openmp is : 0.209884
    The speedup is 0.95071563339,(0.199540/0.209884), so there is a slow down.

Part 2:

1) The time spent for serial code is :0.199540

The time spent for openmp is : 0.209884

The time spent for cuda code is :0.282719

The speedup for openmp is 0.95071563339,(0.199540/0.209884), so there is a slow down.

The speedup for cuda is 0.70578914,(0.199540/0.282719), and there is a slow down.

2) According to the inter net, (3969/625=6.3504). There is a speedup around 6.4, by using cuBLAS V1 then using CPU.