1)

b)

Output:

18 14

62 66

c)

The time taken for multiplying 16x16 matrix with Strassen Algorithm is 1684100 nanoseconds.

d)

The time taken for multiplying 64x64 matrix with Strassen Algorithm is 37035800 nanoseconds. When we look at the time in part c, we can clearly see that the runtime has increased almost 20 times.

e)

The time taken for multiplying 16x16 matrix with Square-Matrix Multiply is 139300 nanoseconds. As we can see, our square matrix multiply code ran 12 times faster than the Strassen method when multiplying a 16x16 matrix.

f)

The time taken for multiplying 64x64 matrix with Square-Matrix Multiply is 2735100 nanoseconds. As we can see, our square matrix multiply code ran almost 13 times faster than the Strassen method when multiplying 64x64 matrix.