**Introduction:**

I have used two different ways to multiply matrices namely “Iterative Algorithm” & “Strassen Algorithm”.

The iterative algorithms uses loops whereas the Strassen algorithm uses formulas to calculate the multiples.

**Approach:**

For the Iterative Algorithm, I used nested For-loops which traversed the elements and multiplied them in order.

The Strassen algorithm uses 7 different equations to compute by breaking down the given problem. This results in a better complexity and cuts down on the For-loops improving calculation time.

**Analysis:**

The three nested loops in Iterative algorithm resulted in a time complexity of O(N^3).

The equations in Strassen algorithm result in the complexity of O(N^log7).

**How to run:**

Change the values of A and B in the starting lines that define the size of the two square matrices.

The Strassen algorithm also used the same size values.

**GitHub:**

https://github.com/Adeenfasihi/AP1