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| **AIM:** | Experiment based on divide and conquer approach. |
| **Program 3** | |
| **PROBLEM STATEMENT :** | Strassen's Matrix Multiplication |
| **ALGORITHM/**  **THEORY:** | Formulas for Strassen’s matrix multiplication.  D1 = (a11 + a22) \* (b11 + b22)  D2 = (a21 + a22)\*b11  D3 = (b12 – b22)\*a11  D4 = (b21 – b11)\*a22  D5 = (a11 + a12)\*b22  D6 = (a21 – a11) \* (b11 + b12)  D7 = (a12 – a22) \* (b21 + b22)  C00= d1 + d4 – d5 + d7  C01 = d3 + d5  C10 = d2 + d4  C11 = d1 + d3 – d2 – d6  Here, C00, C01, C10, and C11 are the elements of the 2\*2 matrix. |
| **PROGRAM:** |  |
| **RESULT:** |  |
| **CONCLUSION:** | Successfully understood and implemented Strassen matrix multiplication. |