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6. Write a program for matrix multiplication using Strassen's matrix multiplication.\

```
#include<iostream>
using namespace std;
class mm
{
private:
	int a[2][2], b[2][2], c[2][2];
public:
	void getdata()
	{
		cout << "Enter the first matrix:";
		for (int i = 0; i < 2; i++)
		{
			for (int j = 0; j < 2; j++)
				cin >> a[i][j];
		}
		cout << "\nEnter the second matrix: ";
		for (int i = 0; i < 2; i++)
		{
			for (int j = 0; j < 2; j++)
				cin >> b[i][j];
		}
	}

	void mul()
	{
		int p, q, r, s, t, u, v;
		p = (a[0][0] + a[1][1]) * (b[0][0] + b[1][1]);
		q = (a[1][1] + a[1][0]) * b[0][0];
		t = (a[0][1] + a[0][0]) * b[1][1];
		r = a[0][0] * (b[0][1] - b[1][1]);
		s = a[1][1] * (b[1][0] - b[0][0]);
		u = (a[1][0] - a[0][0]) * (b[0][0] + b[0][1]);
		v = (a[0][1] - a[1][1]) * (b[1][1] + b[1][0]);
		this->c[0][0] = p + s - t + v;
		this->c[0][1] = r + t;
		this->c[1][0] = q + s;
		this->c[1][1] = p + r - q + u;
	}
	void showmul()
	{
		for (int i = 0; i < 2; i++)
		{
			for (int j = 0; j < 2; j++)
				cout << this->c[i][j] << " ";
		}
		cout << endl;
	}
};
int main()
```

```
{
	mm o;
	o.getdata();
	o.mul();
	o.showmul();
	return 0;
}


/*Output:-
Enter the first matrix:2 2
3 4

Enter the second matrix: 2 1
5 3
14 8 26 15

*/
```