

ASSIGNMENT 7: matrix addition

DATE: 24/03/2021

CODE:

```
#include<iostream>
using namespace std;
int main ()
{
    int m, n, p, q, i, j, A[5][5], B[5][5], C[5][5];
    cout << "Enter rows and column of matrix A : ";
    cin >> m >> n;
    cout << "Enter rows and column of matrix B : ";
    cin >> p >> q;
    if ((m != p) && (n != q))
    {
        cout << "Matrices cannot be added!";
        exit(0);
    }
    cout << "Enter elements of matrix A : ";
    for (i = 0; i < m; i++)
        for (j = 0; j < n; j++)
            cin >> A[i][j];
    cout << "Enter elements of matrix B : ";
    for (i = 0; i < p; i++)
        for (j = 0; j < q; j++)
            cin >> B[i][j];
    for (i = 0; i < m; i++)
        for (j = 0; j < n; j++)
            C[i][j] = A[i][j] + B[i][j];
    cout << "Sum of matrices\n";
    for (i = 0; i < m; i++)
    {
        for (j = 0; j < n; j++)
            cout << C[i][j] << " ";
        cout << "\n";
    }
    return 0;
}
```

OUTPUT:

```
Enter rows and column of matrix A : 2 2
Enter rows and column of matrix B : 2 2
Enter elements of matrix A : 1 2 3 4
Enter elements of matrix B : 5 6 7 8
Sum of matrices
6 8
10 12

...Program finished with exit code 0
Press ENTER to exit console.□
```