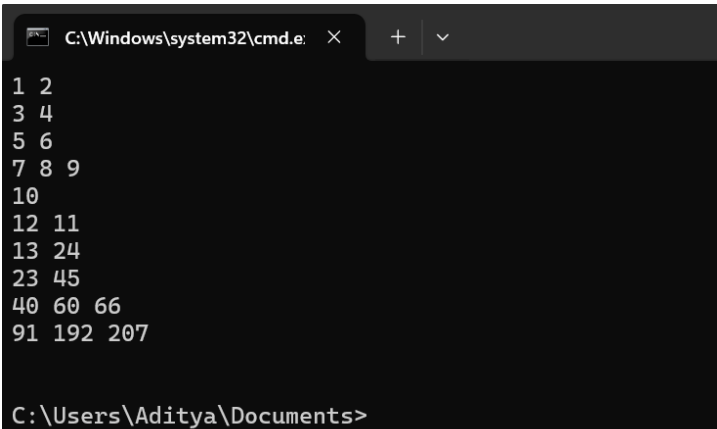## 5. 3D MATRIX MULTIPLICATION PROGRAM

```c
#include <stdio.h>

int main() {
    int x, y, z;
    scanf("%d %d %d", &x, &y, &z);
    int A[x][y][z], B[x][y][z], C[x][y][z];
    for (int i = 0; i < x; i++)
        for (int j = 0; j < y; j++)
            for (int k = 0; k < z; k++)
                scanf("%d", &A[i][j][k]);
    for (int i = 0; i < x; i++)
        for (int j = 0; j < y; j++)
            for (int k = 0; k < z; k++)
                scanf("%d", &B[i][j][k]);
    for (int i = 0; i < x; i++)
        for (int j = 0; j < y; j++)
            for (int k = 0; k < z; k++)
                C[i][j][k] = A[i][j][k] * B[i][j][k];
    for (int i = 0; i < x; i++) {
        for (int j = 0; j < y; j++) {
            for (int k = 0; k < z; k++) {
                printf("%d ", C[i][j][k]);
            }
            printf("\n");
        }
        printf("\n");
    }

    return 0;
}
```

Output:

```
C:\Windows\system32\cmd.e    ×    +    ∨

1 2
3 4
5 6
7 8 9
10
12 11
13 24
23 45
40 60 66
91 192 207


C:\Users\Aditya\Documents>
```