
TP n° 3
Assembleur

Exercice 1 - Traduire le programme C suivant en assembleur :

```
#include <stdio.h>
#include <stdlib.h>

#define N 10
int A[N][N], B[N][N], C[N][N];

void product(int ma[N][N], int mb[N][N], int mc[N][N]) {
    int i, j, k;

    for (i = 0; i < N; ++i) {
        for (j = 0; j < N; ++j) {
            int sum = 0;
            for (k = 0; k < N; ++k) {
                sum += ma[i][k] * mb[k][j];
            }
            mc[i][j] = sum;
        }
    }
}

void display(int ma[N][N]) {
    int i, j;

    for ( i = 0; i < N; ++i) {
        for (j = 0; j < N; ++j) {
            printf("%6d ", ma[i][j]);
        }
        printf("\n");
    }
}

int main() {
    int i, j;

    for (i = 0; i < N; ++i) {
        for (j=0; j < N; ++j) {
            A[i][j] = B[i][j] = i-j;
        }
    }
    product(A,B,C);
    display(C);

    return 0;
}
```