Class Work 4:

MDF implementation of the matrix multiplication algorithm

- Suppose A,B,C of size NxN (double precision elements), suppose B is stored in memory transposed (i.e. columns are memorized by row). Implement by using the FastFlow MDF pattern, the matrix multiplication algorithm starting from the following sequential code:

```
for(size_t i=0;i<N; ++i)
    for(size_t j=0;j<N;++j) {
        A[i*N+j] = i+j;
        B[i*N+j] = i*j;
    }
for(size_t i=0;i<N; ++i)
    for(size_t j=0;j<N;++j) {
        C[i*N +j] = 0;
         for(size_t k=0;k<N;++k) {
            C[i*N + j] += A[ i*N+k ]*B[ j*N+k ];  // B is transposed !
         }
    }
```

- Note: the initialization of A and B has to be overlapped with the computation of C !