

```

process worker[i = 0 to n-1] {
    double a[n];    # row i of matrix a
    double b[n,n]; # all of matrix b
    double c[n];    # row i of matrix c
    receive initial values for vector a and matrix b;
    for [j = 0 to n-1] {
        c[j] = 0.0;
        for [k = 0 to n-1]
            c[j] = c[j] + a[k] * b[k,j];
    }
    send result vector c to the coordinator process;
}

process coordinator {
    double a[n,n]; # source matrix a
    double b[n,n]; # source matrix b
    double c[n,n]; # result matrix c
    initialize a and b;
    for [i = 0 to n-1] {
        send row i of a to worker[i];
        send all of b to worker[i];
    }
    for [i = 0 to n-1]
        receive row i of c from worker[i];
    print the results, which are now in matrix c;
}

```

Matrix Multiplication Using Coordinator/Worker Interaction

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