

```
1 000001 program MatrixMultiplication;
2 000002
3 000003 uses
4 000004     SysUtils, Time;
5 000005
6 000006 const
7 000007     M_SIZE = 400;
8 000008
9 000009 var
10 000010     i, j, k      : LongInt;
11 000011     start_time, end_time : TDateTime;
12 000012     time         : Double;
13 000013     m1, m2, m3    : array[1..M_SIZE, 1..M_SIZE] of LongInt;
14 000014     result        : QWord;
15 000015
16 000016 begin
17 000017     start_time := Now;
18 000018
19 000019     for i := 1 to M_SIZE do
20 000020         for j := 1 to M_SIZE do
21 000021             begin
22 000022                 m1[i, j] := i + j;
23 000023                 m2[i, j] := i + j;
24 000024             end;
25 000025
26 000026             for i := 1 to M_SIZE do
27 000027                 for j := 1 to M_SIZE do
28 000028                     begin
29 000029                         m3[i, j] := 0;
30 000030                         for k := 1 to M_SIZE do
31 000031                             m3[i, j] := m3[i, j] + m1[i, k] * m2[k, j];
32 000032                         end;
33 000033
34 000034                         result := 0;
35 000035                         for i := 1 to M_SIZE do
36 000036                             for j := 1 to M_SIZE do
37 000037                                 result := result + m3[i, j];
38 000038                             end;
39 000039                         end_time := Now;
40 000040                         time := (end_time - start_time) * 24 * 60 * 60;
41 000041
42 000042                         (* ----- *)
43 000043                         WriteLn(Format('Result= %d, Time= %10.6f sec', [result1, time1, result, time2]))
44 000044
45 000045 end.
46 000046
47 000047
48 000048
```