

```
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 00010     i, j, k          : LongInt;
11 00011     start_time, end_time : TDateTime;
12 00012     time               : Double;
13 00013     m1, m2, m3         : array[1..M_SIZE, 1..M_SIZE] of LongInt;
14 00014     result             : QWord;
15 00015
16 00016 begin
17 00017     start_time := Now;
18 00018
19 00019     for i := 1 to M_SIZE do
20 00020         for j := 1 to M_SIZE do
21 00021             begin
22 00022                 begin
23 00023                     m1[i, j] := i + j;
24 00024                     m2[i, j] := i + j;
25 00025             end;
26 00026
27 00027     for i := 1 to M_SIZE do
28 00028         for j := 1 to M_SIZE do
29 00029             begin
30 00030                 m3[i, j] := 0;
31 00031                 for k := 1 to M_SIZE do
32 00032                     m3[i, j] := m3[i, j] + m1[i, k] * m2[k, j];
33 00033             end;
34 00034
35 00035     result := 0;
36 00036     for i := 1 to M_SIZE do
37 00037         for j := 1 to M_SIZE do
38 00038             result := result + m3[i, j];
39 00039
40 00040     end_time := Now;
41 00041     time := (end_time - start_time) * 24 * 60 * 60;
42 00042
43 00043     (* ----- *)
44 00044
45 00045     WriteLn(Format('Result= %d, Time= %10.6f sec', [result1, time1, result, time2]));
46 00046
47 00047 end.
```