

```

1  program detOf3X3;
2  uses crt;
3  const n=3;
4  type matrix= array[0..n-1, 0..n-1] of integer;
5  //determinant of 2x2 matrix function
6  function det2x2( a:integer; b:integer; c:integer; d:integer):integer;
7      begin
8          det2x2:= (a*d) - (b*c);
9      end;
10 //end determinant
11 var M:matrix;
12     i,j, deter:integer;
13 procedure display(li:matrix; si:integer);
14     var i,j:integer;
15     begin
16         writeln('-----');
17         for i:=0 to si-1 do
18             begin
19                 writeln;
20                 for j:=0 to si-1 do
21                     begin
22                         write(li[i,j]: 5);
23                     end;
24                 end;
25                 writeln;
26             writeln('-----');
27         end;
28         // start of main program
29     begin
30         clrscr;
31         for i:=0 to n-1 do
32             begin
33                 for j:=0 to n-1 do
34                     begin
35                         writeln('enter element M[' , i , ', ' , j , ' ]');
36                         read(M[i,j]);
37                     end;
38                 end;
39             //end array element collection
40         deter := M[0,0]*det2x2( M[1,1], M[1,2],M[2,1], M[2,2]) -(M[0,1])*det2x2( M[1,0],
M[1,2],M[2,0], M[2,2]) + M[0,2]*det2x2(M[1,0],M[1,1],M[2,0],M[2,1]);
41         writeln('-----');
42         writeln('          Matrix          ');
43         display(M,n);
44         writeln('-----');
45         writeln('          Determinant of the above matrix          ');
46         writeln('-----');
47         writeln( deter);
48         readkey;
49     end.
50
51
52
53

```