

```
1: program TowersHanoi;
2:
3: function Power(base, toPower: Integer) : Integer;
4: begin
5:   if toPower = 0 then
6:     begin
7:       result := 1;
8:     end
9:   else
10:    begin
11:      result := base * Power(base, toPower -1);
12:    end;
13: end;
14:
15: function fib(n : Integer):Integer;
16: begin
17:   if (n < 2) then
18:     begin
19:       result := n;
20:     end
21:   else
22:     begin
23:       WriteLn('fibonacci ',n);
24:       result := fib(n-2) + fib(n-1);
25:     end;
26: end;
27:
28:
29: procedure MoveDisc (n, fromPole, toPole, tempPole: Integer);
30: begin
31:   if n > 0 then
32:     begin
33:       MoveDisc(n-1, fromPole, tempPole, toPole);
34:       WriteLn('move ', n, ' to ', toPole);
35:       MoveDisc(n-1, tempPole, toPole, fromPole);
36:     end;
37: end;
38: procedure Main();
39: begin
40:   MoveDisc(3, 1, 3, 2);
41:   WriteLn('-----');
42:   WriteLn('Fibonnaci of number 9 is :',fib(9));
43:   WriteLn('-----');
44:   WriteLn(Power(2,8));
45: end;
46:
47: begin
48:   Main();
49: end.
```