Spiralna matrica

* ***Ispuniti matricu dimenzija MxN spiralno***:

program p1;

var a:array[1..100,1..100] of integer;

m,k,t,n,i,j,b,c:integer;

procedure ram(var x,y:integer);

var i:integer;

begin

for i:=1 to y do begin a[t+1,i+t]:=k; k:=k+1; end;

for i:=2 to x do begin a[i+t,y+t]:=k; k:=k+1; end;

for i:=y-1 downto 1 do begin a[x+t,i+t]:=k; k:=k+1; end;

for i:=x-1 downto 2 do begin a[i+t,t+1]:=k; k:=k+1; end;

end;

begin

readln(m,n); b:=m; c:=n; k:=1;

while (m>0) and (n>0) do

begin ram(m,n); m:=m-2; n:=n-2; t:=t+1; end;

for i:=1 to b do

begin

for j:=1 to c do write(a[i,j],' ');

writeln;

end;

end.

procedure ram(var x,y:integer);

var i:integer;

begin

for i:=1 to y do begin a[t+1,i+t]:=k; k:=k+1; end;

for i:=2 to x do begin a[i+t,y+t]:=k; k:=k+1; end;

for i:=y-1 downto 1 do begin a[x+t,i+t]:=k; k:=k+1; end;

for i:=x-1 downto 2 do begin a[i+t,t+1]:=k; k:=k+1; end;

end;

1 2 3 4 5

14 15 16 17 6

13 20 19 18 7

12 11 10 9 8

begin

readln(m,n); b:=m; c:=n; k:=1;

while (m>0) and (n>0) do

begin ram(m,n); m:=m-2; n:=n-2; t:=t+1; end;

for i:=1 to b do

begin

for j:=1 to c do write(a[i,j],' ');

writeln;

end;

end.