Colegă: Purici Adriana

```pascal
// 3 p.50
program stiva1;

type
  tren = ^vagon;
  vagon = record
    ni: integer;
    si: string;
    af: 1960..2000;
    tv: string;
    cdi: real;
    pv: string;
    prec: tren;
  end;

var
  s: tren;
  n: integer;

procedure introduc;
var
  r: tren;
begin
  new(r);
  write('nr. de inmatriculare: ');readln(r^.ni);
  write('statia de inmatriculare: ');readln(r^.si);
  write('anul fabricarii: ');readln(r^.af);
  write('tipul vagonului: ');readln(r^.tv);
  write('capacitatea de incarcare (tone): ');readln(r^.cdi);
  write('proprietarul vagonului: ');readln(r^.pv);
  r^.prec := s;
  s := r;
end;

procedure afis;
var
  r: tren;
begin
  if s = nil then writeln('stiva este vida')
  else begin
    writeln('stiva include elementele:');
    r := s;
    while r <> nil do
    begin
      writeln('nr. de inmatriculare: ', r^.ni);
      writeln('statia de inmatriculare: ', r^.si);
      writeln('anul fabricarii: ', r^.af);
      writeln('tipul vagonului: ', r^.tv);
      writeln('capacitatea de incarcare (tone): ', r^.cdi);
      writeln('proprietarul vagonului: ', r^.pv);
      r := r^.prec;
      writeln;
    end;
  end;
end;

begin
  writeln('introdu nr. de vagoane');readln(n);
  for var i := 1 to n do introduc;
  writeln;
  afis;
end.
```

```pascal
// 4 p.50
program stiva2;
type
  adresa = ^angajat;
  angajat = record
    nm: string;
    pr: string;
    an: 1930..1985;
    zi: 1..31;
    luna: 1..12;
    anul: integer;
    prec: adresa;
  end;

var
  s: adresa;
  n: integer;

procedure introduc;
var
  r: adresa;
begin
  new(r);
  write('numele: ');readln(r^.nm);
  write('prenumele: ');readln(r^.pr);
  write('anul nasterii: ');readln(r^.an);
  writeln('data angajarii-');
  write('ziua: ');readln(r^.zi);
  write('luna: ');readln(r^.luna);
  write('anul: ');readln(r^.anul);
  r^.prec := s;
  s := r;
end;

procedure afis;
var
  r: adresa;
begin
  if s = nil then writeln('stiva este vida')
  else begin
    writeln('stiva include elementele:');
    r := s;
    while r <> nil do
    begin
      writeln('nume: ', r^.nm);
      writeln('prenume: ', r^.pr);
      writeln('anul nasterii: ', r^.an);
      writeln('data angajarii-');
      writeln('ziua: ', r^.zi);
      writeln('luna: ', r^.luna);
      writeln('anuli: ', r^.anul);
      r := r^.prec;
      writeln;
    end;
  end;
end;

begin
  writeln('introdu nr. de angajati');readln(n);
  Writeln('introdu datele angajatilor:');
  for var i := 1 to n do introduc;
  writeln;
  afis;
end.
```

```pascal
// 2 p.54
program coada1;

type
  aeroport = ^avion;
  avion = record
    ndi: integer;
    ta: string;
    nr: integer;
    urm: aeroport;
  end;

var
  p, u: aeroport;
  n: integer;

procedure introduc;
var
  r: aeroport;
begin
  new(r);
  write('numar de inmatriculare: ');readln(r^.ndi);
  write('tipul avionului: ');readln(r^.ta);
  write('numarul rutei: ');readln(r^.nr);
  r^.urm := nil;
  if p = nil then begin p := r;u := r end
  else begin u^.urm := r;u := r end;
end;

procedure afis;
var
  r: aeroport;
begin
  if p = nil then writeln('coada este vida')
  else begin
    writeln('coada include elementele:');
    r := p;
    while r <> nil do
    begin
      writeln('numar de inmatriculare: ', r^.ndi);
      writeln('tipul avionului: ', r^.ta);
      writeln('numarul rutei: ', r^.nr);
      r := r^.urm;
    end;
  end;
end;

begin
  writeln('introdu nr de avioane:');readln(n);
  for var i := 1 to n do introduc;
  writeln;
  afis;
end.
```