```
program ex3;
type AdresaCandidat=^Candidat;
Candidat=record
Numeprenume: string;
notamedia :real;
Urm: Adresa Candidat;
end;
var i,n : integer; p,r,v,u : AdresaCandidat;
procedure creare(var p:AdresaCandidat);
var nume:string; media: real;
begin write('introdu elevul (Cheia de sfarsit e cuvantul final) '); readln(nume);
while nume <>'final' do
begin write('introdu media elevului ',nume,' '); readln(media);
new(R); r^.numeprenume:=nume; r^.notamedia:=media; r^.urm:=nil;
if P=nil then P:=R else v^.urm:=r;
v:=r;
write('Cheia de sfarsit e cuvantul final '); readln(nume);
end:
procedure afisare(u:AdresaCandidat);
begin R:=u;
while R<>nil do
begin writeln(r^.numeprenume:20,r^.notamedia:7:2); r:=r^.urm; end;
end:
procedure excludeC(var p:AdresaCandidat);
var n:string;
begin r:=p; v:=r;
begin writeln('Introduceti candidatul care retrage actele');
readln(n);
while r<>nil do
begin if r^.numeprenume= n
then if P=r then begin P:=r^.urm; v:=p; dispose (r);r:=v; end
else begin v^.urm:=r^.urm; dispose (r);r:=v^.urm; end
end:
end;
end:
procedure include(var p:AdresaCandidat);
var nume:string; media: real;
begin writeln('Introduceti candidatul care depune actele');
readln(nume); readln(media);
new(R); r^.numeprenume:=nume; r^.notamedia:=media;
r^.urm:=p; P:=R;
end;
procedure afisare75(u:AdresaCandidat);
begin R:=u;
while R<>nil do
begin if r^.notamedia>7.5 then writeln(r^.numeprenume:20,r^.notamedia:7:2); r:=r^.urm; end;
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end;
procedure cei_cu_9(var p,u:AdresaCandidat);
var q: AdresaCandidat;
begin u:=nil; r:=p;
while r<>nil do
begin if r^.notamedia>=9.0
then begin new(q); q^.numeprenume:=r^.numeprenume;
q^.notamedia:=r^.notamedia; q^.urm:=nil;
if u=nil then begin u:=q; v:=q; end
else begin v^.urm:=q; v:=q; end;
end;
r:=r^.urm;
end:
end;
procedure exclude6(var p:AdresaCandidat;var ne:integer);
begin ne:=0; r:=p; v:=r;
while r<>nil do
begin if r^.notamedia<6.0
then if P=r then begin P:=r^.urm; v:=p; dispose (r);r:=v; end
else begin v^.urm:=r^.urm; dispose (r);r:=v^.urm; end
else begin ne:=ne+1; v:=r; r:=r^.urm; end;
end;
end;
begin
p:=nil; creare(p); writeln('Lista initiala este'); afisare(p);
excludeC(p); writeln('Lista dupa excluderea candidatului ce si-a retras actele este'); afisare(p);
include(p); writeln('Lista cu cel inclus la inceputul listei'); afisare(p);
writeln('Lista celor cu media mai mare de 7,5'); afisare75(p);
cei_cu_9(p,u); writeln('Lista celor cu 9'); afisare(u);
excludeC(p); writeln('Lista dupa excluderea candidatilor cu media mai mica de 6 este'); afisare(p);
end.
```

Program ex4; type sved = ^anketa; anketa = record fio: string; voz: byte; next: sved; end:

```
var
 first, first1: sved;
 last, last1: sved;
 p, p1: sved;
 n, i: byte;
begin
 write('cate elemente');readIn(n);
 new(first);
 write('Numele si prenumele:');
 readIn(first^.fio);
 write('Varsta:');
 readln(first^.voz);
 first^.next := nil;
 last := first;
 for i := 2 to n do
 begin
  new(p);
  write('Numele si prenumele:');
  readln(p^.fio);
  write('Varsta:');
  readln(p^.voz);
  p^{n}.next := nil;
  last^.next := p;
  last := p;
 end;
 p := first;
 while p <> nil do
 begin
  writeln(p^.fio:15, p^.voz:10);
  p := p^n.next;
 end:
 readln;
 write('Nr elementelor:');readln(n);
 new(first1);
 write('Numele si prenumele:');
 readIn(first1^.fio);
 write('Varsta:');
 readln(first1^.voz);
 first1^.next := nil;
 last1 := first1;
 for i := 2 to n do
 begin
  new(p1);
  write('Numele si prenumele:');
  readln(p1^.fio);
  write('Varsta:');
  readln(p1^.voz);
  p1^n.next := nil;
  last1^.next := p1;
  last1 := p1;
 end;
 p1 := first1;
 while p1 <> nil do
 begin
  writeln(p1^.fio:15, p1^.voz:10);
  p1 := p1^.next;
 end;
 writeln('Listei 1 atasam elementele listei 2 - 1');
 writeln('Listei 2 atasam elementele listei 1 - 2');
 repeat
  write('Introdu 1 sau 2: ');readln(i);
 until i in [1, 2];
```

```
case i of
  1:
   begin
     last^.Next := First1;
     last := last1;
     p1 := first;
     while p1 <> nil do
     begin
      writeln(p1^.fio:15, p1^.voz:10);
      p1 := p1^.next;
     end;
   end;
  2:
   begin
     last1^.Next := First;
     last1 := last;
     p1 := first1;
     while p1 <> nil do
     begin
      writeln(p1^.fio:15, p1^.voz:10);
      p1 := p1^.next;
     end;
   end;
 end;
 readIn;
end.
```