

GrubleacGabriela

program PrelucrareLista;

type

```
AdresaCandidat = ^Candidat;  
Candidat = record  
  Numeprenume: string;  
  notamedia: real;  
  Urm: AdresaCandidat;  
end;
```

var

```
i, n: integer;  
nume: string;  
media: real;  
p, r, v, u: AdresaCandidat;
```

procedure creare(**var** p: AdresaCandidat);

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;  
end;
```

end;

procedure exclude(**var** p: AdresaCandidat; **var** ne: **integer**);

begin

```
ne := 0; {ne- numarul de elemente} 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; {exclude}
```

end;

procedure afisare1(**var** p: AdresaCandidat; **var** ne: **integer**);

begin

```
r := p;  
while r <> nil do  
  begin  
    if (r^.urm <> nil) and (r <> p)  
      then writeln(r^.numeprenume:20, r^.notamedia:7:2);  
    r := r^.urm;  
  end;  
end;
```

end;

procedure include(**var** p: AdresaCandidat);

begin

```
writeln('Introduceti candidatul care depune actele');
```

```

    readln(ume); readln(media);
    new(R); r^.numeprenume := ume; r^.notamedia := media;
    r^.urm := p; P := R;
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;
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;

begin
    p := nil; creare(p); writeln('Lista initiala este'); afisare(p);
    writeln('Lista fara primul si ultimul'); afisare1(p, n);
    include(p); writeln('Lista cu cel inclus la inceputul listei'); afisare(p);
    cei_cu_9(p, u); writeln('Lista celor cu 9'); afisare(u);
    exclude(p, n); writeln('Lista dupa excludere este'); afisare(p);
end.

```