**Ex.3 pag.46**

**Program** P1;

**type**

adresacandidat = ^candidat;

candidat = **record**

Numeprenume: string;

Notamedia: real;

Urm: AdresaCandidat;

**end**;

**var**

e, f, g: adresacandidat;

**procedure** creare;

**var**

s: string;

**begin**

writeln('introdu elevul , final=sfarsit'); readln(s);

**while** s <> 'final' **do**

**begin**

**new**(e);

e^.numeprenume := s;

writeln('introdu nota medie'); readln(e^.notamedie);

e^.urm := nil;

**if** g = nil **then begin**

**new**(g);

e := g;

**end**;

**if** f = bil **then begin**

**new**(f);

f := e;

**end**

**else**

**begin**

f^.urm := e;

f := e;

**end**;

writeln('introdu elevul,final=sfarsit'); readln(s);

**end**;

**end**;

**procedure** afisare;

**var** e1:adresacandidat;

**begin**

e1:=g;

**while** e1 <> nil **do begin**

writeln (e1^.NumePrenume);

writeln (e1^.NoteMedie);

e1:=e1^.urm;

**end**;

**end**;

**procedure** excludere;

**var** e1,e2:adresacandidat;

s:string;

**begin** e1:=g;

writeln('care canddat isi ia actele');readln(s);

**while** e1<>nil **do begin**

**if** e1^.NumePrenume=s **then begin**

**if** e2=nil **then begin**

g:=e1^.urm;

dispose(e1);

**exit**;

**end**

**else begin**

e2^.urm:=e1^.urm;

dispose (e1);

**exit**;

**end**;

**end**;

e2:=e1;

e1:=e1^.urm;

**end**;

**end**;

**procedure** includere ;

**var** e1,e2:adresacandidat;

**begin**

**new**(e2);

e1:=g

writeln('introduceti candidatul care isi depune actele');

readln(e2^.numeprenume);

writeln('introduceti nota medie');readln(e2^.notamedie);

**end**;

**procedure** media\_7,5;

writeln('Lista cu candidati cu media mai mare de 7,5: ');

g:=head;

**while** g<>nil **do**

**begin**

**if** g^.NotaMedie>7.5 **then** writeln(C^.NumePrenume,' ',C^.NotaMedie);

**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** media\_6;

writeln('Lista cu candidati cu media mai mica de 6: ');

g:=head;

**while** g<>nil **do**

**begin**

**if** g^.NotaMedie<6 **then** dispose(g);

**end**;

**begin**

creare;

afisare;

excludere;

afisare;

media\_7,5;

cei\_cu\_9;

media\_6;

**end**.

**Ex.4 pag.46**

Program ex\_4;

type List=^ListItem;

ListItem = record data : string;

value : real; order : integer;

urm : List;

end;

list\_item = record name : string;

base : List;

count : integer;

end;

database = array[1..100] of list\_item;

var a:database;

r,b,v:List; c:integer;

ans:string;

procedure create\_list();

var ans, name:string;

i:integer;

begin inc(c); writeln('List Name : ');

readln(name);

while ans<>'EXIT' do begin writeln();

writeln(' Type EXIT to end list creation ');

writeln('----- PRESS ENTER TO CONTINUE ------');

readln(ans);

if ans<>'EXIT' then begin new(r);

inc(i); writeln(i,'| Data :');

readln(r^.data);

writeln(i,'| Value :');

readln(r^.value); r^.order:=i;

if i=1 then b:=r else v^.urm:=r;

v:=r;

end else begin a[c].base:=b;

a[c].name:=name;

a[c].count:=i;

end;

end;

end;

procedure concat();

var one,two,i,save:integer;

name:string;

q,base,top:List;

begin writeln('1st List Database ID : ');

readln(one);

writeln('2nd List Database ID : ');

readln(two);

inc(c);

writeln('New list name : ');

readln(name);

a[c].name:=name;

b:=a[one].base;

r:=b;

while r<>nil do begin new(q);

inc(i);

q^.order:=i;

q^.data:=r^.data;

q^.value:=r^.value;

if i=1 then a[c].base:=q else begin top^.urm:=q;

end;

top:=q;

r:=r^.urm;

end;

save:=i;

b:=a[two].base;

r:=b;

while r<>nil do begin new(q);

inc(i);

q^.order:=i;

q^.data:=r^.data;

q^.value:=r^.value;

top^.urm:=q;

top:=q;

r:=r^.urm;

end;

end;