**//ex 4(b)p.46**

**program** concat;

**type**

lista = ^element;

element = **record**

inf: integer;

urm: lista;

**end**;

**var**

p, c, u, p1, c1, u1, l, b, e: lista;

**procedure** creare(**var** p, c, u: lista);

**var**

n: integer;

**begin**

writeln('introduceti elemnetele listei( pentru a finaliza lista itroduceti "666")');readln(n);

**while** n <> 666 **do**

**begin**

**new**(c);c^.inf := n;c^.urm := nil;

**if** p = nil **then** p := c **else** u^.urm := c;u := c;

readln(n);

**end**;

**end**;

**procedure** afisare(**var** p, c: lista);

**begin**

writeln('lista concatenata:');

c := p;

**while** c <> nil **do**

**begin**

writeln(c^.inf);

c := c^.urm;

**end**;

**end**;

**procedure** concatenare;

**begin**

c := p;l := nil;

**new**(b);b^.inf := c^.inf;b^.urm := nil;

l := b;e := b;c := c^.urm;

**while** c <> nil **do**

**begin**

**new**(b);b^.inf := c^.inf;b^.urm := nil;

e^.urm := b;e := b;

c := c^.urm;

**end**;

c1 := p1;

**while** c1 <> nil **do**

**begin**

**new**(b);b^.inf := c1^.inf;b^.urm := nil;

e^.urm := b;e := b;

c1 := c1^.urm;

**end**;

**end**;

**begin**

writeln('lista 1:');creare(p, c, u);

writeln('lista 2:');creare(p1, c1, u1);

concatenare;afisare(l, b);

**end**.

//ex 4(c)p.46

**program** descompune;

**type**

lista = ^element;

element = **record**

inf: integer;

urm: lista;

**end**;

**var**

p, c, u, p1, c1, u1, p2, c2, u2: lista;

**procedure** creare;

**var**

n: integer;

**begin**

writeln('introduceti elemnetele listei( pentru a finaliza lista itroduceti "666")');readln(n);

**while** n <> 666 **do**

**begin**

**new**(c);c^.inf := n;c^.urm := nil;

**if** p = nil **then** p := c **else** u^.urm := c;u := c;

readln(n);

**end**;

**end**;

**procedure** afisare(**var** p, c: lista);

**begin**

c := p;

**while** c <> nil **do**

**begin**

writeln(c^.inf);

c := c^.urm;

**end**;

**end**;

**procedure** descompunere;

**var**

cheie: integer;

**begin**

writeln('introduceti elementul inaintea caruia se face descompunerea');

readln(cheie);

c := p;**new**(c1);c1^.inf := c^.inf;

c1^.urm := nil;p1 := c1;u1 := c1;

c := c^.urm;

**while** c^.inf <> cheie **do**

**begin**

**new**(c1);c1^.inf := c^.inf;

c1^.urm := nil;u1^.urm := c1;u1 := c1;

c := c^.urm; **end**;

**new**(c2);c2^.inf := c^.inf;

c2^.urm := nil;p2 := c2;u2 := c2;

c := c^.urm;

**while** c <> nil **do**

**begin**

**new**(c2);c2^.inf := c^.inf;

c2^.urm := nil;u2^.urm := c2;u2 := c2;

c := c^.urm; **end**;

**end**;

**begin**

creare;descompunere;

writeln('lista descompusa:');

writeln('lista 1');afisare(p1, c1);

writeln('lista 2');afisare(p2, c2);

**end**.

//ex 4(d)p.46

**program** selecteaza;

**type**

lista = ^element;

element = **record**

inf: integer;

urm: lista;

**end**;

**var**

p, c, u, p1, c1, u1: lista;

**procedure** creare;

**var**

n: integer;

**begin**

writeln('introduceti elemnetele listei( pentru a finaliza lista itroduceti "666")');readln(n);

**while** n <> 666 **do**

**begin**

**new**(c);c^.inf := n;c^.urm := nil;

**if** p = nil **then** p := c **else** u^.urm := c;u := c;

readln(n);

**end**;

**end**;

**procedure** afisare(**var** p, c: lista);

**begin**

c := p;

**while** c <> nil **do**

**begin**

writeln(c^.inf);

c := c^.urm;

**end**;

**end**;

**procedure** selectie;

**begin**

**while** c <> nil **do**

**begin**

**if** c^.inf < 0 **then begin**

**new**(c1);c1^.inf := c^.inf;

c1^.urm := nil;

**if** p1 = nil **then** p1 := c1;

**if** u1 = nil **then** u1 := c1 **else begin**

u1^.urm := c1;

u1 := c1;

**end**;

**end**;

c := c^.urm;

**end**;

**end**;

**begin**

creare;

selectie;

writeln('se vor selecta elementele mai mici de cat 0');

afisare(p1, c1);

**end**.