TEMA STIVA

**Program** ex\_3;

**type** AdresaCelula=^Celula;

tren=**record**

nr : integer;

station : string;

year : integer;

wagon\_type : string;

capacity :real;

owner : string;

**end**;

Celula=**record**

Info : tren;

Prec : AdresaCelula;

**end**;

**var** S : AdresaCelula;

c : char;

**procedure** Introduc;

**var** R : AdresaCelula;

**begin**

**new**(R);

write('Daţi elementul ce urmează');

writeln(' să fie introdus:');

**with** R^.Info **do**

**begin**

writeln('nr: ');readln(nr);

writeln('station: ');readln(station);

writeln('year:');readln(year);

writeln('wagon\_type:');readln(wagon\_type);

writeln('capacity:');readln(capacity);

writeln('owner:');readln(owner);

**end**;

R^.Prec:=S;

S:=R;

**end**;

**procedure** Afis;

**var** R : AdresaCelula;

**begin**

**if** S=nil **then** writeln('Stiva este vidă')

**else begin**

writeln('Stiva include elementele:');

R:=S;

**while** R<>nil **do begin**

writeln(R^.Info);

R:=R^.Prec;

**end**;

**end**;

readln;

**end**;

**begin**

S:=nil;

**repeat**

writeln('Meniu:');

writeln('I - Introducerea elementului;');

writeln('A - Afişarea stivei pe ecran');

writeln('O - Oprirea programului');

write('Opţiunea='); readln(c);

**case** c **of**

'I' : Introduc;

'A' : Afis;

'O' :

**else** writeln('Opţiune necunoscută')

**end**;

**until** c='O';

**end**.

**Program** ex\_4;

**type** AdresaCelula=^Celula;

date=**record**

day : 1..31;

month : 1..12;

year : integer;

**end**;

angajat=**record**

name : string;

last\_name : string;

year : integer;

employed : date;

**end**;

Celula=**record**

Info : angajat;

Prec : AdresaCelula;

**end**;

**var** S : AdresaCelula;

c : char;

**procedure** Introduc;

**var** R : AdresaCelula;

**begin**

**new**(R);

write('Daţi elementul ce urmează');

writeln(' să fie introdus:');

**with** R^.Info **do**

**begin**

writeln('Nume: ');readln(name);

writeln('Prenume: ');readln(last\_name);

writeln('Anul Nasterii:');readln(year);

writeln('Data angajarii:');

**with** R^.Info.employed **do**

**begin**

writeln('ziua'); readln(day);

writeln('luna'); readln(month);

writeln('anul'); readln(year);

**end**;

**end**;

R^.Prec:=S;

S:=R;

**end**;

**procedure** Afis;

**var** R : AdresaCelula;

**begin**

**if** S=nil **then** writeln('Stiva este vidă')

**else begin**

writeln('Stiva include elementele:');

R:=S;

**while** R<>nil **do begin**

writeln(R^.Info);

R:=R^.Prec;

**end**;

**end**;

readln;

**end**;

**begin**

S:=nil;

**repeat**

writeln('Meniu:');

writeln('I - Introducerea elementului;');

writeln('A - Afişarea stivei pe ecran');

writeln('O - Oprirea programului');

write('Opţiunea='); readln(c);

**case** c **of**

'I' : Introduc;

'A' : Afis;

'O' :

**else** writeln('Opţiune necunoscută')

**end**;

**until** c='O';

**end**.

TEMA COZI

**Program** EX\_2\_P54;

**type** AdresaCelula=^Celula;

avion=**record**

no : string;

plane\_type : string;

route\_no : integer;

**end**;

Celula=**record**

Info : avion;

Urm : AdresaCelula;

**end**;

**var** P,

U : AdresaCelula;

c : char;

**procedure** Introduc;

**var** R : AdresaCelula;

**begin**

**new**(R);

write('Daţi elementul ce urmează');

writeln(' să fie introdus:');

**with** R^.Info **do begin**

writeln('Numarul de inmatriculare'); readln(no);

writeln('Tipul avionului'); readln(plane\_type);

writeln('Numarul rutei'); readln(route\_no);

**end**;

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 : AdresaCelula;

**begin**

**if** P=nil **then** writeln('Coada este vidă')

**else begin**

write('Coada include');

writeln(' elementele:');

R:=P;

**while** R<>nil **do**

**begin**

writeln(R^.Info);

R:=R^.Urm;

**end**;

**end**;

**end**;

**begin**

P:=nil; U:=nil;

**repeat**

writeln('Meniu:');

writeln('I - Introducerea elementului;');

writeln('A - Afişarea cozii la ecran;');

writeln('O - Oprirea programului');

write('Opţiunea='); readln(c);

**case** c **of**

'I' : Introduc;

'A' : Afis;

'O' :

**else** writeln('Opţiune necunoscută')

**end**;

**until** c='O';

**end**.