Stegarescu Olivia si Zaicenco Ilie

Ex.3

```pascal
Program ex3;
type tren=^celula;
     celula=record
     nrinmat:integer;
     statiain:string;
     anulfabricarii:integer;
     tipulvagon:string;
     capacitate:real;
     proprietar:string;
     prec:tren;
end;
 var p,r,v:tren;
 c:integer;
 s:tren;

Procedure creare;
 var r:tren;
begin
new(r);
writeln('introduceti nrinmat');
readln(r^.nrinmat);
writeln('introduceti statiain');
readln(r^.statiain);
writeln('introduceti anulfabricarii');
readln(r^.anulfabricarii);
writeln('introduceti tipulvagon');
readln(r^.tipulvagon);
writeln('introduceti capacitate');
readln(r^.capacitate);
writeln('indruduceti proprietar');
readln(r^.proprietar);
r^.prec:=s;
s:=r;
end;
Procedure afisare;
var r:tren;
begin
if s=nil then writeln('stiva e vida')
             else begin writeln('Stiva Include elementele');
             r:=s;
             while r<>nil do begin
             writeln(r^.nrinmat);
             writeln(r^.statiain);
             writeln(r^.anulfabricarii);
             writeln(r^.tipulvagon);
             writeln(r^.capacitate);
             writeln(r^.proprietar);
             r:=r^.prec;
             end;
             end;
             end;
begin
s:=nil;
repeat
writeln('Meniu: ');
writeln('1-creare');
writeln('2-afisare');
writeln('3-oprire');
write('Optiune:');
readln(c);
```

```pascal
case c of
1:creare;
2:afisare;
3:
else writeln('Optiuni necunoscute')
end;
until c=3;
end.
```

Ex.4

```pascal
Program ex4;
type Adresa=^Celula;
 Celula=record
 Nume:string;
 Prenume:string;
 Anul:integer;
 DataAngajarii:string;
 Prec:Adresa;
end;
   var s:Adresa;
       n,i:integer;
Procedure introducere;
 var r:Adresa;
begin
new(r);
   writeln('Introduceti numele si prenumele');
   readln(r^.Nume);
   readln(r^.Prenume);
   writeln('Introduceti anul nasterii');
   readln(r^.Anul);
   writeln('Introfuceti data angajarii');
   readln(r^.DataAngajarii);
r^.prec:=s;
s:=r;
end;

Procedure Afisare;
var r:Adresa;
  begin
  if s=nil then writeln('stiva e vida') else begin
                writeln('stiva este');
                r:=s;
                while r<>nil do begin
                writeln(r^.Nume , r^.Prenume, r^.Anul, r^.DataAngajarii);
                r:=r^.prec;
                end;
                end;
                end;
begin
writeln ('Introduceti nr de elemente');
readln(n);
s:=nil;
for i:=1 to n do
Introducere;
Afisare;
end.
```