```
Program ex_3;
type AdresaCandidat = ^Candidat;
  Candidat = record
   NumePrenume: string;
   NotaMedie: real;
   Urm: AdresaCandidat;
  end:
var r,b,v:AdresaCandidat;
  g,b1,v1:AdresaCandidat;
  i:integer;
  n:real;
procedure create();
 var input:string;
 begin
  while input<>'EXIT' do begin
   writeln(");
   writeln('<||--- Type EXIT to stop list item creation ---||>');
                     PRESS ENTER TO CONTINUE
   writeln('
   readln(input);
   if input<>'EXIT' then begin
    inc(i);
    new(r);
    writeln(i,'# Nume Prenume: '); readln(r^.NumePrenume);
    writeln(i,'# Nota Med: '); readln(r^.NotaMedie);
    r^.Urm:=nil;
    if i = 1 then b:=r else v^.Urm:=r;
    v:=r;
   end;
  end:
 end;
procedure display();
 var j:integer;
 begin
  r:=b;
               Current Data:');
  writeln('
  writeln();
  writeln();
  while r<>nil do begin
   writeln(r^.NumePrenume,':',r^.NotaMedie);
   r:=r^.Urm;
  end;
 end;
procedure display_q();
 var j:integer;
 begin
  q:=b1;
               Current Data:');
  writeln('
  writeln();
  writeln();
  while q<>nil do begin
   writeln(q^.NumePrenume,':',q^.NotaMedie);
   q:=q^.Urm;
  end;
 end;
```

```
procedure remove();
 var name:string;
   save:AdresaCandidat;
  writeln('Nume Student Retragere: '); readln(name);
  r:=b;
  while r<>nil do begin
   if r^.NumePrenume = name then begin
    if r=b then begin
     save:=r;
     r:=r^.Urm;
     dispose(save);
     b:=r;
    end else begin
     v^.Urm:=r^.Urm;
     save:=r^.Urm;
     dispose(r);
     r:=save;
    end;
   end else begin
    v:=r;
    r:=r^.Urm;
   end;
  end;
 end;
procedure remove_grade();
 var n:real;
   save:AdresaCandidat;
 begin
  writeln('Remove under : '); readln(n);
  r:=b;
  while r<>nil do begin
   if r^.NotaMedie < n then begin
    if r=b then begin
     save:=r;
     r:=r^.Urm;
     dispose(save);
     b:=r;
    end else begin
     v^.Urm:=r^.Urm;
     save:=r^.Urm;
     dispose(r);
     r:=save;
    end;
   end else begin
    v:=r;
    r:=r^.Urm;
   end;
  end;
 end;
procedure create_one();
 begin
  writeln('Candidat Nou:');
  writeln();
  writeln();
```

```
inc(i);
  new(r);
   writeln(i,'# Nume Prenume : '); readln(r^.NumePrenume);
   writeln(i,'# Nota Med : '); readln(r^.NotaMedie);
  r^.Urm:=nil;
  v^.Urm:=r;
  v:=r;
 end;
procedure show(n:real);
 begin
  writeln('----');
  writeln('List Limit: ',n);
  writeln();
  writeln();
  r:=b;
  while r<>nil do begin
   if r^.NotaMedie >= n then writeln(r^.NumePrenume,':',r^.NotaMedie);
   r:=r^.Urm;
  end;
 end;
procedure satisfactory();
 begin
  show(7.5);
 end;
procedure new_list_limit(n:real);
 var i:integer;
 begin
  writeln();
  writeln('New List Limit: ',n);
  writeln();
  r:=b;
  while r<>nil do begin
   if r^.NotaMedie >= n then begin
    inc(i);
    new(q);
    q^.NotaMedie:=r^.NotaMedie;
    q^.NumePrenume:=r^.NumePrenume;
    q^.Urm:=nil;
    if i=1 then b1:=q else v1^.Urm:=q;
    v1:=q;
   end;
   r:=r^.Urm;
  end;
 end;
procedure menu();
 var ans:char;
 begin
  while ans<>'E' do begin
  writeln();
  writeln();
  writeln('<---->');
            MENU ');
  writeln('
  writeln('<---->');
  writeln('N - New List Item');
  writeln('R - Remove Based on Name');
```

```
writeln('G - Remove Based on Grade');
  writeln('L - Create New List Based on Grade');
  writeln('/\/\\\\\\\\\\);
  writeln('C - Display New List');
  writeln('S - Display List (over the grade limit)');
  writeln('T - Diplay Satisfactory Grades (>7.5)');
  writeln('D - Display List');
  writeln('E - EXIT');
  writeln();
  writeln();
  readln(ans);
  if ans = 'N' then create one() else
   if ans = 'R' then remove() else
    if ans = 'G' then remove_grade() else
     if ans = 'L' then begin writeln('New List Grade Limit: '); readln(n); new_list_limit(n); end else
     if ans = 'C' then display_q() else
       if ans = 'S' then begin writeln('Grade Limit: '); readln(n); show(n) end else
       if ans = 'T' then satisfactory() else
        if ans = 'D' then display();
 end;
 end;
begin
 create();
 menu();
end.
{FIX DELETE PROCEDURE}
```