OLIMPIADA NAȚIONALĂ DE INFORMATICĂ
Etapa județeană
Clasa a – VII –a
Soluții

Problema 1

```pascal
program nu_te_supara_frate;
type vect=array[1..100] of byte;
var n,j1,j2,s1,s2,zar:byte;
    p:vect;
    gata:boolean;
    f,g:text;

procedure citire;
var i:byte;
begin
  reset(f);
  readln(f,n);
  for i:=1 to n do
    read(f,p[i]);
  readln(f);
end;

procedure joc;
begin
  j1:=1;
  j2:=1;
  gata:=false;
  while not eof(f) and not gata do
    begin
            read(f,zar);
            j1:=j1+zar;
            if j1>n then
                j1:=j1-n;
            if (p[j1]=0) or ((j1=j2) and (j1<>1)) then
                begin
                   s1:=0;
                   j1:=1;
                end
            else
                s1:=s1+p[j1];
            if (j1=1) and (s1<>0) then
                gata:=true;
            writeln('* ',j1,' ',s1);
            if not gata and not eof(f) then
                begin
                   read(f,zar);
```

```pascal
                      j2:=j2+zar;
                      if j2>n then
                      j2:=j2-n;
                      if (p[j2]=0) or ((j1=j2) and (j2<>1)) then
                          begin
                                s2:=0;
                                j2:=1;
                          end
                      else
                          s2:=s2+p[j2];
                  end;
              if (j2=1) and (s2<>0) then
                  gata:=true;
              writeln('* ',j2,' ',s2);
          end;
    close(f);
end;

procedure afisare;
begin
  rewrite(g);
  if gata then
    begin
      if j1=1 then
        writeln(g,1)
      else
        writeln(g,2)
    end
  else
    begin
      if s1>s2 then
        writeln(g,1)
      else
        begin
          if s2>s1 then
            writeln(g,2)
          else
                      if j1>j2 then
              writeln(g,1)
            else
              writeln(g,2);
        end;
    end;
  writeln(g,j1,' ',s1);
  writeln(g,j2,' ',s2);
  close(g);
end;

begin
  assign(f,'9-joc.in');
  assign(g,'joc.ok');
  citire;
```

```
  joc;
  afisare;
{readln;}
end.
```

Problema 2

```pascal
program siruri;
type vect=array[1..100] of integer;
var x,y:vect;
    n:byte;
    f:text;
    cale1,cale2:string;

procedure citire;
var i,j:byte;
begin
  assign(f,'siruri.in');
  reset(f);
  readln(f,n);
  for i:=1 to n do
    read(f,x[i]);
  close(f);
end;

procedure constructie;
var i,j:byte;
begin
  for i:=1 to n do
    y[i]:=1;
  for i:=1 to n-1 do
    for j:=i+1 to n do
      if x[i]>x[j] then
        y[i]:=y[i]+1
      else
        y[j]:=y[j]+1;

end;

procedure afisare;
var i:byte;
begin
  assign(f,'siruri.out');
  rewrite(f);
  for i:=1 to n do
    write(f,y[i],' ');
  close(f);
end;

begin
  citire;
  constructie;
  afisare;
end.
```