

Program - Hanojské veže :)

Program napísaný v jazyku Pascal.

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program HanojskeVeze0k;

var
  tyce: array[1..3,0..5] of integer;
  i,j: integer;
  z,na: integer;
  top1,top2,top3: integer;
  pom,pokus:integer;

begin
  top1:=5;
  tyce [1,1]:=10;
  tyce [1,2]:=8;
  tyce [1,3]:=6;
  tyce [1,4]:=4;
  tyce [1,5]:=2;
  top2:=0;
  tyce [2,1]:=0;
  tyce [2,2]:=0;
  tyce [2,3]:=0;
  tyce [2,4]:=0;
  tyce [2,5]:=0;
  top3:=0;
  tyce [3,1]:=0;
  tyce [3,2]:=0;
  tyce [3,3]:=0;
  tyce [3,4]:=0;
  tyce [3,5]:=0;

writeln;
  for i:=5 downto 1 do begin
    for j:=1 to 3 do begin
      if (tyce[j,i])=10 then begin
        write(' xxxxxIxxxxx ');
        end;
      if (tyce[j,i])= 8 then begin
        write(' xxxxIxxxx ');
        end;
      if (tyce[j,i])= 6 then begin
        write(' xxxIxxx ');
        end;
      if (tyce[j,i])= 4 then begin
        write(' xxIxx ');
        end;
      if (tyce[j,i])= 2 then begin
        write(' xIx ');
        end;
      if (tyce[j,i])= 0 then begin
        write(' I ');
        end;
      end;
      end;
      writeln;
      end;
      repeat
        writeln;
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writeln ('Kotuc z ktorej tyce chces premiestnit?');
readln(z);
writeln ('Kotuc chces premiestnit na ktoru tyc?');
readln(na);
if (z=na) then begin
writeln ('POMYLIL SI SA. ');
end;
if (z=1) and (na=2) then begin
if (tyce[2,top2]>tyce[1,top1]) or (tyce[2,top2]=0)then begin
top2:=top2+1;
tyce[2,top2]:=tyce[1,top1];
top1:=top1-1;
tyce[1,top1+1]:=0;
pokus:=pokus+1;
end
else writeln ('NEMOZES PREMIESTNIT > KOTUC NA <.')
end;

if (z=2) and (na=1) then begin
if (tyce[1,top1]>tyce[2,top2]) or (tyce[1,top1]=0)then begin
top1:=top1+1;
tyce[1,top1]:=tyce[2,top2];
top2:=top2-1;
tyce[2,top2+1]:=0;
pokus:=pokus+1;
end
else writeln ('NEMOZES PREMIESTNIT > KOTUC NA <.')
end;

if (z=1) and (na=3) then begin
if (tyce[3,top3]>tyce[1,top1]) or (tyce[3,top3]=0)then begin
top3:=top3+1;
tyce[3,top3]:=tyce[1,top1];
top1:=top1-1;
tyce[1,top1+1]:=0;
pokus:=pokus+1;
end
else writeln ('NEMOZES PREMIESTNIT > KOTUC NA <.')
end;

if (z=2) and (na=3) then begin
if (tyce[3,top3]>tyce[2,top2]) or (tyce[3,top3]=0)then begin
top3:=top3+1;
tyce[3,top3]:=tyce[2,top2];
top2:=top2-1;
tyce[2,top2+1]:=0;
pokus:=pokus+1;
end
else writeln ('NEMOZES PREMIESTNIT > KOTUC NA <.')
end;

if (z=3) and (na=1) then begin
if (tyce[1,top1]>tyce[3,top3]) or (tyce[1,top1]=0)then begin
top1:=top1+1;
tyce[1,top1]:=tyce[3,top3];
top3:=top3-1;
tyce[3,top3+1]:=0;
pokus:=pokus+1;
end

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else writeln ('NEMOZES PREMIESTNIT > KOTUC NA <.')
end;
if (z=3) and (na=2) then begin
if (tyce[2,top2]>tyce[3,top3]) or (tyce[2,top2]=0)then begin
top2:=top2+1;
tyce[2,top2]:=tyce[3,top3];
top3:=top3-1;
tyce[3,top3+1]:=0;
pokus:=pokus+1;
end
else writeln ('NEMOZES PREMIESTNIT > KOTUC NA <.')
end;
writeln;
for i:=5 downto 1 do begin
for j:=1 to 3 do begin
if (tyce[j,i])=10 then begin
write(' xxxxxIxxxxx ');
end;
if (tyce[j,i])= 8 then begin
write(' xxxxIxxxx ');
end;
if (tyce[j,i])= 6 then begin
write(' xxxIxxx ');
end;
if (tyce[j,i])= 4 then begin
write(' xxIxx ');
end;
if (tyce[j,i])= 2 then begin
write(' xIx ');
end;
if (tyce[j,i])= 0 then begin
write('      I ');
end;
end;
end;
writeln;
end;
writeln;
writeln ('POCET PREMIESTNENI =',pokus);
writeln;
writeln ('HRAME DALEJ (NIE=0)?');
readln(pom);
until pom=0;
end.

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