program PRG;

const c1 = 10;

const c2 = 'a';

type t1 = array(.10.) of integer;

var v1:integer;

v2:array(.10.) of array(.10.) of integer; (\*this is possible: v3:array(.10.) of t1; \*)

function f(p1 : integer; var p2: char) : integer;

begin

end.

procedure p(v1 : integer);

const c1 = 'a';

c3 = 10;

type t1 = integer;

t2 = array(.10.) of integer;

var v2 : array(.10.) of integer;

v3 : char;

program test;

const zero = 0;

type a = array(.10.) of integer;

var arr : array(.10.) of a;

procedure temp(var x : char);

begin

x := 1;

end;

function temp2(x : integer) : integer;

begin

temp2 := x;

end;

begin

call temp('a');

call writeI(temp2(5));

for i := zero to 10 do

begin

for j := zero to 10 do

begin

arr(.i.)(.j.) := zero;

end

end;

call temp('a');

call writeI(temp2(5));

end.

program MAXELEMENT;

type a = array(.10.) of integer;

var arr : a;

function largest(max : integer) : integer; (\* param type is basic type - char and integer only \*)

begin

for i := 0 to 10 do

begin

if arr(.i.) > max then

begin

max := arr(.i.);

end;;;;;;;;;

end;

largest := max; (\* return statement in kpl \*)

end;

begin

max := 0;

for i := 0 to 10 do

begin

if arr(.i.) > max then

begin

max := arr(.i.);

end;

end;

call writeI(largest(0));

end.

// Example 1

Program Example1; (\* Example 1 \*)

Begin

End. (\* Example 1 \*)

// Example 2

Program Example2; (\* Factorial \*)

Var n : Integer;

Function F(n : Integer) : Integer;

Begin

If n = 0 Then F := 1 Else F := N \* F (N - 1);

End;

Begin

For n := 1 To 7 Do

Begin

Call WriteLn;

Call WriteI( F(i));

End;

End. (\* Factorial \*)

// Example 3

PROGRAM EXAMPLE3; (\* TOWER OF HANOI \*)

VAR I:INTEGER;

N:INTEGER;

P:INTEGER;

Q:INTEGER;

C:CHAR;

PROCEDURE HANOI(N:INTEGER; S:INTEGER; Z:INTEGER);

BEGIN

IF N != 0 THEN

BEGIN

CALL HANOI(N-1,S,6-S-Z);

I:=I+1;

CALL WRITELN;

CALL WRITEI(I);

CALL WRITEI(N);

CALL WRITEI(S);

CALL WRITEI(Z);

CALL HANOI(N-1,6-S-Z,Z)

END

END; (\*END OF HANOI\*)

BEGIN

FOR N := 1 TO 4 DO

BEGIN

FOR I:=1 TO 4 DO

CALL WRITEC(' ');

CALL READC(C);

CALL WRITEC(C)

END;

P:=1;

Q:=2;

FOR N:=2 TO 4 DO

BEGIN

I:=0;

CALL HANOI(N,P,Q);

CALL WRITELN

END

END. (\* TOWER OF HANOI \*)

// Example 4

PROGRAM EXAMPLE4; (\* Example 4 \*)

CONST MAX = 10;

TYPE T = INTEGER;

VAR A : ARRAY(. 10 .) OF T;

N : INTEGER;

CH : CHAR;

PROCEDURE INPUT;

VAR I : INTEGER;

TMP : INTEGER;

BEGIN

N := READI;

FOR I := 1 TO N DO

A(.I.) := READI;

END;

PROCEDURE OUTPUT;

VAR I : INTEGER;

BEGIN

FOR I := 1 TO N DO

BEGIN

CALL WRITEI(A(.I.));

CALL WRITELN;

END

END;

FUNCTION SUM (VAR A: INTEGER; B:CHAR) : INTEGER;

VAR I: INTEGER;

S : INTEGER;

BEGIN

S := 0;

I := 1;

WHILE I <= N DO

BEGIN

S := S + A(.I.);

I := I + 1;

END

END;

BEGIN

CH := 'y';

WHILE CH = 'y' DO

BEGIN

CALL INPUT;

CALL OUTPUT;

CALL WRITEI(SUM);

CH := READC;

END

END. (\* Example 4 \*)