FUNCTION read\_size () : INTEGER

VAR

n : INTEGER;

BEGIN

REPEAT

Write ("Give a valid size positive and less than 100");

Read (n);

UNTIL (n >0 and n<100);

RETURN n ;

END

PROCEDURE read\_tab (n:INTEGER, VAR tab:ARRAY\_OF INTEGER)

VAR

i: INTEGER;

BEGIN

FOR i FROM 0 TO n-1 DO

Read(tab[i]);

END\_FOR

END

PROCEDURE tri\_insertion (VAR tab: ARRAY\_OF INTEGER, n: INTEGER)

VAR

i, j, elt : INTEGER;

BEGIN

FOR i FROM 2 TO n STEP 1 DO

elt = tab[i];

j:= i;

WHILE (tab[j] > elt) DO

tab[j] := tab[j-1];

j:= j-1;

END\_WHILE

tab[j]:= elt;

END\_FOR

END

PROCEDURE affichage (tab: ARRAY\_OF INTEGER, n: INTEGER)

VAR

i : INTEGER;

BEGIN

FOR i FROM 0 TO n-1 STEP 1 DO

Write ("The new array: ", tab[i]);

END\_FOR

ALGORITHM sort\_insertion

VAR

Tab : ARRAY\_OF INTEGER[n];

n : INTEGER;

BEGIN

n:= read\_size();

read\_tab(n, Tab);

tri\_insertion(Tab, n);

affichage(Tab, n);

END