



Task proposed by H. Ledgard (theoretical task)

The elements of an integer array are sorted in not descending order. The function *daug* finds the number that occurs most frequently in the array. If several numbers have the same number of occurrences, any of them is suitable.

```
function daug (a: array[m..n : integer] of integer): integer;
  var   i,           { index of the element }
        r,           { value of the element }
        k,           { which identical }
        sk: integer; { no of identical el. }
begin
  r := a[m];
  sk := 1; k := 1;
  for i := m + 1 to n do
    if a[i] = a[i-1] then begin
      k := k + 1;
      if k > sk then begin
        r := a[i];
        sk := k
      end
    end
  end
  daug := r
end;
```

Task. The provided algorithm is reasonable, however it can be improved and shortened by eliminating the variable *k* and one conditional statement. Your task is to do this.