```
 1: program Primtester_3;
 2:
 3: { simple primtester between range for perfomance- and filehandling
 4: has a function and procedure, consts, globals and locals, locs = 59
 5: shows sequence, selection and iteration (units are implicit)
 6: to teach programming for beginners in maXbox!}
 7:
 8: const
 9:   FROM_RANGE = 1000;
10:   TO_RANGE = 5000;
11:
12: //globals
13: var
14:   mylist: TStringList;   //is an object from class TStringList!
15:   beforeTime, afterTime: string;
16:
17: function checkPrim(acti: integer): boolean;
18: var //locals
19:   j: integer;
20:   isprim: boolean;
21: begin
22:   isprim:= true;
23:   for j:= 2 to round(SQRT(acti)) do
24:     if ((acti mod j) = 0) then begin
25:       isprim:= false
26:       break
27:     end;
28:   result:= isprim;
29: end;
30:
31:
32: procedure TestPrimNumbers(Vfrom_range, Vto_range: integer);
33: var acti, count: integer;
34: begin
35:   count:= 0; //init
36:   mylist:= TStringList.create;
37:   for acti:= Vfrom_range to Vto_range do begin
38:     inc(acti)
39:     if checkPrim(acti) then begin
40:       inc(count)
41:       mylist.add(intToStr(count) +': '+intToStr(acti))
42:     end //if
43:   end //for
44: end;
45:
46: //main program
47: begin
48:   //time performance
49:   beforeTime:= Now;
50:     TestPrimNumbers(FROM_RANGE, TO_RANGE);
51:   afterTime:= Now;
52:   writeln('start: '+ beforeTime + ' from: '+intToStr(FROM_RANGE))
53:   writeln('stop: ' + afterTime + ' to: '+intToStr(TO_RANGE))
54:   mylist.add(memo2.text)
55:   mylist.saveToFile('primetest8.txt')
56:   //memo2.lines.loadFromFile('primetest8.txt')
57:   mylist.Free;
58:   //orthogonal and idempotent!
59: end.
```