```vhdl
library IEEE;
use IEEE.STD_LOGIC_1164.ALL;
package costanti is
    constant nb:integer:=8;
end package costanti;

-- n-bit -2^(nb-1) : 2^(nb-1)-1
package myfunc is
    function pow2(nbit: in integer) return integer;
end package myfunc;
package body myfunc is
    function pow2(nbit: in integer) return integer is
       variable i: integer;
        variable pown: integer;
    begin
      pown:=1;
      for i in 0 to nbit loop
          exit when (i=nbit);
          pown:=pown*2;
      end loop;
      return pown;
    end function pow2;
end package body myfunc;
```