--and function answers are all boolean elements of a boolean list equal True?

and = \ bs -> null bs || head bs && and (tail bs)

--or function answers does any component of the boolean list bs equal True?

or = \bs -> not (null bs) && (head bs || or (tail bs))

--issorted function answers is the list sorted in numerical order?

issorted = \ns -> (null ns || null (tail ns)) || head ns <= head (tail ns)

&& issorted (tail ns)

--range function gives a list of the numbers from number 'lo' up

--to number 'hi', inclusive

range = \lo -> \hi -> if (lo > hi) then

[]

else

lo : range (lo+1) hi

--copies function gives a list of 'n' copies of item 'x'

copies = \n -> \x -> if n == 0 then

[]

else

x : copies (n-1) x