Prolog Lab Worksheet #2

Use the Prolog system installed on your VM and write the following programs:

(1) Define a predicate max/3 that takes two numbers as its first two
arguments and unifies the last argument with the maximum
of the two.

(2) Define a predicate maxlist/2 takes a list of numbers as its first
argument and unifies the second argument with the maximum
number in the list. The predicate should fail if the list is empty.

(3) Define a predicate ordered/1 that takes a list of numbers as its
argument and succeeds if and only if the list is in non-decreasing
order.

(4) Define the predicate member/2 that takes list as its first argument
and a term as its second argument. The predicate is to return
true if the term is in the list otherwise it is to return false.

Hint: the usual relational operators are supported in Prolog as predicates. For example,

bigger(X,Y) :- X >= Y.