Prolog
Exercises

Task 1:

Define Prolog clauses for a predicate **concatenate** to append a list L1 and a list L2 to get a result list L3.

Task 2:

Define Prolog clauses to *split* a list L by an element E into a sublist K of the lower/equal elements and a sublist G of the larger elements.

Task 3:

Define Prolog clauses for a sorting predicate *quicksort* to generate for a list L of numbers an upwardly sorted list S of these numbers. Use thereby the predicates defined in Task 1 and Task 2.

Task 4:

Define Prolog clauses for *reversing* a list L into a list R containing the elements of L in reversed sequence.

Task 5:

How is it possible to generate a downwardly sorted list of numbers with the predicates define in Tasks 1 – 4?