18.10.2022

Laboratory 2

7.

a. Write a predicate to compute the intersection of two sets.

b. Write a predicate to create a list (m, ..., n) of all integer numbers from the interval [m, n].

a. final($L = [l_1, l_2, \dots, l_n]$, e) =

true, if $l_1 = e$

false, if $len(L) == 0$

final($l_2, \dots, l_n, e$), otherwise

intersection($L1 = [l_1, l_2, \dots, l_n]$, $L2 = [e_1, e_2, \dots, e_m]$) =

$\emptyset$, if $len(L1) == 0$ or $len(L2) == 0$

$\{l_1\} \cup$ intersection($L1 = [l_2, \dots, l_n]$, $L2 = [e_1, \dots, e_m]$), if final($e_1, \dots, e_m, l_1$) = true

intersection($L1 = [l_2, \dots, l_n]$, $L2 = [e_1, \dots, e_m]$), otherwise

b. integer(a, b) =

$\emptyset$, if $a > b$

$[a]$, if $a == b$

$\{a+1\} \cup$ integer($a+1, b$), otherwise