1.a

Diff(l1,l2,ln, lista) = ( [] , daca n = 0

( l1 U diff(l2,l3,…ln, lista), daca member(l1, lista) = false si n > 0

( diff(l2,l3,…ln, lista) , altfel

Member (x, l1, l2,….ln) = ( true, daca l1 = x si n > 0

( member(x, l2,l3…ln), daca n > 0

( false, altfel

Teste:

Member(2, [1,2, 3]) = member(2, [2,3]) = true

Member(2, [1, 4, 2]) = member(2, [4, 2]) = member(2, [2]) = true

Member(2, [1, 4, 5]) = member(2, [4, 5]) = member(2, [5]) = member(2, []) = false

Diff([a, b, c, d], [z, b, y, d]) = a U diff([b, c, d], [z, b, y, d])

=a U diff([c, d], [z, b, y, d])

= a U c U diff([d], [z, b, y, d])

= a U c U diff([], [z, b, y, d])

= a U c = [a, c]

Diff([a, b], [a, b, c, d]) = diff([b], [a, b, c, d])

= diff([], [a, b, c, d]) = []

1.b

Add\_one\_after\_even(l1, l2, …ln) = ( [] , daca n = 0

( l1 U 1 U add\_one\_after\_even(l2, l3, …, ln), daca l1%2=0 si n > 0

( l1 U add\_one\_after\_even(l2, l3, …, ln), altfel

Teste:

Add\_one\_after\_even([2, 1, 4, 7]) = 2 U 1 U add\_one\_after\_even([1, 4, 7])

= 2 U 1 U 1 U add\_one\_after\_even([4, 7])

= 2 U 1 U 1 U 4 U 1 U add\_one\_after\_even([7])

= 2 U 1 U 4 U 1 U U 7add\_one\_after\_even([]) = [2, 1, 1, 4, 1, 7]

Add\_one\_after\_even([3, 7]) = 3 U Add\_one\_after\_even([7])

= 3 U 7 U Add\_one\_after\_even([]) = [3, 7]

Add\_one\_after\_even([2, 4]) = 2 U 1 U add\_one\_after\_even([4])

= 2 U 1 U 4 U 1 U Add\_one\_after\_even([]) = [2, 1, 4, 7]