Logic Programming – Laboratory 13
Revision

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1 Exercises

1. Consider the second degree equation. Read the coefficients A,B,C from the keyboard. Solve the equation by considering both cases when A equals 0 and when A is different from 0.

```
?− solving_degree_2_eq.
Introduce the coefficients:
A=1.

B=−2.

C=1.

The solutions of the equation are x1=1.0 x2=1.0
Do you want to continue (yes,no)?=yes.
Introduce the coefficients:
A=2.

B=3.

C=1.

The solutions of the equation are x1=−0.5 x2=−1.0
Do you want to continue (yes,no)? no.
false
```

2. Find the k-th element from a list.

```
?− kelem([1,4,6,7,3],3,X).
X=6.
```

3. Transform a given list such that it will not contain sublists (all the elements have the same depth level).

```
?− liniarization([a, [b, [c, d], e], f], L).
L = [a, b, c, d, e, f]
```

4. Generate (randomly) a permutation for the elements of a given list.

```
?- permutation([a,b,c,d,e,f], L).
L = [b,a,d,c,e,f]
```

5. Generate a menu from which the user can select which algorithm he wants to test over the input data (the input data exists into a file). Print recursively the menu until the option for exit the program. The algorithms which can be applied are at least 5 (solved by now at the homework).