LABORATOR 4:

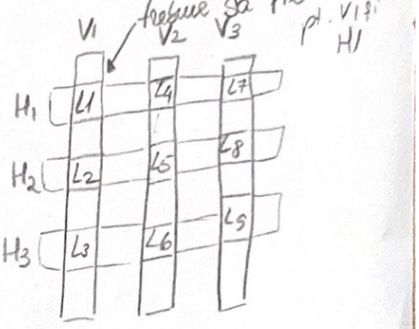
Ex1. L, N, M, listaNelem(L, N, M) = True dacă M = o listă cu N elem. care sunt elem. ale lui L.

```
listaNelem(_, 0, []).
listaNelem(L, N, [H|T]):- N >= 0, N1 is N-1, member(H, L), listaNelem(L, N1, T).
```

Ex2.

abalone
abandon
anagram
connect
elegant
enhance

```
word(abalone, a, b, a, l, o, n, e).
word(abandon, a, b, a, n, d, o, n).
word(anagram, a, n, a, g, r, a, m).
word(connect, c, o, n, n, e, c, t).
word(elegant, e, l, e, g, a, n, t).
word(enhance, e, n, h, a, n, c, e).
```




```
crossword(V1, V2, V3, H1, H2, H3):- word(V1, _, L1, _, L2, _, L3, _),
                                    word(H1, _, L1, _, L4, _, L7, _),
                                    word(V2, _, L4, _, L5, _, L6, _),
                                    word(H2, _, L2, _, L5, _, L8, _),
                                    word(V3, _, L7, _, L8, _, L9, _),
                                    word(H3, _, L3, _, L6, _, L9, _).
```

connected(5,6) etc. puncte deja scrise

Ex3.

```
pathc(X, Y, [X, Y]):- connected(X, Y).
pathc(X, Y, [X|L]):- connected(X, Z), pathc(Z, Y, L).
```