Resolução Prova 2024

```
1  % Q1 -> L[1,2,3,4,5,6,7,8]
2
3  %Q2:
4  wN(0):-write(0),!.
5  wN(N):-write(N),N1 is N-1, wN(N1),write(N).
6
7  piramide(0):-wN(0),nl,!.
8  piramide(N):-
9      N1 is N-1,
10     wN(N),nl,
11     piramide(N1).
12
13 %Q3:
14 crialist(0,_,[]):-!.
15 crialist(X,Y,[Y|B]):-
16     X1 is X - 1,
17     crialist(X1,Y,B).
18
19 %Q5:
20 transforma("Despejar jarro 1 no jarro 2", [X,Y], [0,Y1]):- X > 0, Y < 4, Y1 is X + Y, Y1 =< 4.
21 transforma("Despejar jarro 1 no jarro 2", [X,Y], [X1,4]):- X > 0, Y < 4, X1 is X + Y - 4, X + Y > 4.
22 transforma("Despejar jarro 2 no jarro 1", [X,Y], [X1,0]):- Y > 0, X < 3, X1 is X + Y, X1 =< 3.
23 transforma("Despejar jarro 2 no jarro 1", [X,Y], [3,Y1]):- Y > 0, X < 3, Y1 is X + Y - 3, X + Y > 3.
```

?- Your query goes here ...

Resolução Prova 2023

```
 1  %Q1 -> l = [10, 30]
 2  p(10).
 3  p(-20).
 4  p(30).
 5
 6  %Q2:
 7  pto(1,3).
 8  pto(-1,5).
 9  pto(-1,-2).
10  pto(3,-1).
11  pto(2,4).
12  pto(4,-5).
13
14  quadrante(Q,L) :-
15      findall(p(X,Y), (pto(X,Y), no_quadrante(Q,X,Y)),L).
16
17  no_quadrante(1, X, Y) :- X > 0, Y > 0.
18  no_quadrante(2, X, Y) :- X < 0, Y > 0.
19  no_quadrante(3, X, Y) :- X < 0, Y < 0.
20  no_quadrante(4, X, Y) :- X > 0, Y < 0.
21
22  %Q3:
23  palindromo([]):-!.
24  palindromo([_]):-!.
25  palindromo(L):-
26      reverse(L,L).
27
28  %Q4:
```

Resolução Prova 2022

```
 1  %Q1: findall(Nome-Ano,(carro(Nome,b,Ano)),L).
 2
```

```prolog
 3  carro(fusca,b,1974).
 4  carro(gol,v,1980).
 5  carro(voyage,p,1978).
 6  carro(gol,b,2001).
 7  carro(uno,b,2004).
 8
 9  brancos(L):-
10      findall(Nome-Ano,(carro(Nome,b,Ano)),L).
11
12  %Q2:
13  pares([],[]).
14  pares([X|C],[X|C1]):-
15      R is X mod 2,
16      R =:= 0,
17      pares(C,C1).
18  pares([X|C],C1):-
19      R is X mod 2,
20      R =:= 1,
21      pares(C,C1).
22  %2° solução
23  pares2([], []).
24  pares2(L1, L2) :-
25      findall(X, (member(X, L1), X mod 2 =:= 0), L2).
26
27  %Q3:
```