member(X,[X|Xs]).

member(X,[Y|Xs]) :– member(X,Xs).

Done meint leere Anfrage und Fail meint Blitz

? -member(X, [2,3]).

X/2, Xs/3

X/X1, Y/2, Xs/[3]

Done

X=2

? - member(X1,[3]).

X1/3

Done

X=3

? - member(4, [2,3]).

Fail

X/4, Y/2, Xs/[3]

? - member(4,[3]).

Fail

? - member(X, [2,3]), X=4.

X/2, Xs/3

X/X1, Y/2, Xs/[3]

? - member(2,[2|3]),2=4.

Fail

? - member(X1,[3]), X1=4.

X1/3

? - member(3,[3]), 3=4.

Fail