

# Some simple predicates

- Load family.pl
- Father
- Parent
- Etc...
- Talk through relationships
- How about cousins?

# Some numerical stuff

- $A=1, B=2, C=3, Z=A+B+C, Z>3.$
- $A=1, B=2, C=3, Z=A+B+C, C>3.$
- $\text{assert}(\text{sum3}(\text{Result}, A, B, C):-\text{Result is } A + B + C).$
- $\text{sum3}(R, 1, 2, 3).$
-

# Implementing “functions”

- Factorial example
- Order of matching
- Recursion
- Termination case

# Lists

- `assert(head(H,[H|_])).`
- `assert(tail(T,[_],T))`
- `assert(second(S,A):- tail([S|_],A))`
- `A=[a,b,c], second(S,A)`
- `A=[a,b,c,d,e], tail(B,A), second(S,B)`
- `member(a,[a,b,c,d,e])` (semicolon?)

# Do some work?

- Write code to calculate:
- $1/1 + 1/2 + 1/3 + 1/4 \dots\dots\dots$
- Use the factorial example as a starting point
- Now do it so that you can put any number on the top:
- $2/1 + 2/2 + 2/3 + 2/4 \dots\dots\dots$