Funções Prolog

length\2

True if *Length* represents the number of elements in *List*.

```
length([1,1,3], A)
```

This predicate is a true relation and can be used to produce a list (holding variables) of length *Length*.

```
length(L, 3)
```

```
A is 0, length(L, 3), maplist(=(A), L)
```

The predicate is non-deterministic, producing lists of increasing length if *List* is a *partial list* and *Length* is a variable.

```
length(L, R)
```

append\3

```
append(?List1, ?List2, ?List1AndList2)
```

List1AndList2 is the concatenation of *List1* and *List2*

```
append([a,b], [c], X).
append(X, [Last], [a,b,c]).
append([a,b], More, List).
```

findall\3

Create a list of the instantiations *Template* gets successively on backtracking over *Goal* and unify the result with *Bag*. Succeeds with an empty list if *Goal* has no solutions.

```
foo(a, b, c).
foo(a, b, d).
foo(b, c, e).
foo(b, c, f).
foo(c, c, g).
findall(C, foo(A,B,C), L)
```