

The following two are equivalent:

`pair x y`
`(x, y)`

```
destruct p as (n, m) .
```

For whatever reason there are no brackets around the pattern.

List literals:

`[]`

`[1, ..., n]`

Cons:

`el :: lst`

++

default

```
if X then Y else Z.
```

```
match X with  
| true  => Y  
| false => Z  
end.
```

Creating type aliases:

```
Definition bag := natlist.
```

The name of another Definition.

```
Definition sum : bag => bag -> bag := app.
```


induction l as [| n l']

Case "l = nil".

...

Case "l = cons n l'".

...

SearchAbout foo

Prints all the theorems Coq knows that involve `foo`.

It allows you match the current goal to the conclusion of a conditional hypothesis of the current context. Like modus ponens in reverse. Keep in mind a non-conditional statement can be viewed in this case as a degenerate conditional, allowing you to match the current subgoal to a hypothesis and end the proof.