

In the standard library.

A set of data values.

```
Inductive bool : Type :=  
  | true  : bool  
  | false : bool.
```

```
Definition negb (b : bool) : bool :=  
  match b with  
  | true => false  
  | false => true  
end.
```

```
Definition andb (b1 : bool) (b2 : bool) : bool :=  
  match b1 with  
  | true => b2  
  | false => false  
end.
```

Argument and result types.

Example test_negation:

(negb true) = false.

Proof. simpl. reflexivity. Qed.

- Use `Eval` on a test case and observe the result.
- Use `Example` to record expected result, then as `Coq` to verify.
- "extract" function `Definition` to OCaml, Scheme, or Haskell.

Eval simpl in (negb true).

Surround the fragments with square brackets.

Definition admit {T : Type} : T. Admitted.

It fills in the hole in an incomplete Definitions.

admit **fills in holes** in Definitions.

Admitted **fills in holes** in Examples.

bool->bool->bool

It causes Coq to print the type of an expression.