

Last login: Fri Jan 26 13:23:35 on ttys005

carbon:\$ utop

Welcome to utop version 2.0.2 (using OCaml version 4.06.0)!

Type #utop_help for help about using utop.

```
-( 13:37:11 )-< command 0 >-----{ counter: 0 }-
utop # #use "simple.ml";;
val power : int -> float -> float = <fun>
val cube : float -> float = <fun>
val gcd : int -> int -> int = <fun>
val sum : int list -> int = <fun>
val all : bool list -> bool = <fun>
val even2ways : int list -> bool = <fun>
val is_even : int -> bool = <fun>
File "simple.ml", line 47, characters 6-10:
Warning 26: unused variable even.
val even2ways_better : int list -> bool = <fun>
val string_concat : string -> string list -> string = <fun>
val is_empty : 'a list -> bool = <fun>
val length : 'a list -> int = <fun>
-( 13:37:11 )-< command 1 >-----{ counter: 0 }-
utop # #use "simple.ml";;
val power : int -> float -> float = <fun>
val cube : float -> float = <fun>
val gcd : int -> int -> int = <fun>
val sum : int list -> int = <fun>
val all : bool list -> bool = <fun>
val even2ways : int list -> bool = <fun>
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File "simple.ml", line 81, characters 2-32:
Warning 8: this pattern-matching is not exhaustive.
Here is an example of a case that is not matched:
[]
val head : 'a list -> 'a = <fun>
-( 13:37:13 )-< command 2 >-----{ counter: 0 }-
utop # head [1;2;3] ;;
- : int = 1
-( 13:37:32 )-< command 3 >-----{ counter: 0 }-
utop # head 1::2::3::[] ;;
Error: This expression has type int but an expression was expected of type
      'a list
-( 13:37:37 )-< command 4 >-----{ counter: 0 }-
utop # head (1::2::3::[]0) ;;
Error: Syntax error: ')' expected, the highlighted '(' might be unmatched
```

```

-( 13:37:44 )-< command 5 >-----{ counter: 0 }-
utop # head (1::2::3::[]) ;;
- : int = 1
-( 13:37:49 )-< command 6 >-----{ counter: 0 }-
utop # head [] ;;
Exception: Match_failure ("simple.ml", 81, 2).
-( 13:37:53 )-< command 7 >-----{ counter: 0 }-
utop # (1, "hello") ;;
- : int * string = (1, "hello")
-( 13:38:02 )-< command 8 >-----{ counter: 0 }-
utop # (1,3.14,'c') ;;
- : int * float * char = (1, 3.14, 'c')
-( 13:45:58 )-< command 9 >-----{ counter: 0 }-
utop # (3, ["asdf";"qwer";"qwer"]);;
- : int * string list = (3, ["asdf"; "qwer"; "qwer"])
-( 13:46:26 )-< command 10 >-----{ counter: 0 }-
utop # (1,2,3.14) ;;
- : int * int * float = (1, 2, 3.14)
-( 13:46:40 )-< command 11 >-----{ counter: 0 }-
utop # (1,("c",4.5)) ;;
- : int * (string * float) = (1, ("c", 4.5))
-( 13:47:10 )-< command 12 >-----{ counter: 0 }-
utop # (1,"c",4.5) ;;
- : int * string * float = (1, "c", 4.5)
-( 13:47:38 )-< command 13 >-----{ counter: 0 }-
utop # let (x,y) = (1,2) ;;
val x : int = 1
val y : int = 2
-( 13:47:52 )-< command 14 >-----{ counter: 0 }-
utop # let point = (3.1, 5.7) ;;
val point : float * float = (3.1, 5.7)
-( 13:48:42 )-< command 15 >-----{ counter: 0 }-
utop # let (x,y) = point ;;
val x : float = 3.1
val y : float = 5.7
-( 13:49:02 )-< command 16 >-----{ counter: 0 }-
utop # () ;;
- : unit = ()
-( 13:49:10 )-< command 17 >-----{ counter: 0 }-
utop # (1,2) ;;
- : int * int = (1, 2)
-( 13:49:26 )-< command 18 >-----{ counter: 0 }-
utop # (1) ;;
- : int = 1
-( 13:49:50 )-< command 19 >-----{ counter: 0 }-
utop # #use "simple.ml";;
val power : int -> float -> float = <fun>
val cube : float -> float = <fun>
val gcd : int -> int -> int = <fun>
val sum : int list -> int = <fun>
val all : bool list -> bool = <fun>
val even2ways : int list -> bool = <fun>
val is_even : int -> bool = <fun>

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File "simple.ml", line 81, characters 2-32:

Warning 8: this pattern-matching is not exhaustive.

Here is an example of a case that is not matched:

```
[]
val head : 'a list -> 'a = <fun>
val first : 'a * 'b * 'c -> 'a = <fun>
-( 13:50:50 )-< command 20 >-----{ counter: 0 }-
utop # first (1,2,3) ;;
- : int = 1
-( 13:53:34 )-< command 21 >-----{ counter: 0 }-
utop # List.rev ;;
- : 'a list -> 'a list = <fun>
-( 13:53:40 )-< command 22 >-----{ counter: 0 }-
utop # #use "simple.ml";;
val power : int -> float -> float = <fun>
val cube : float -> float = <fun>
val gcd : int -> int -> int = <fun>
val sum : int list -> int = <fun>
val all : bool list -> bool = <fun>
val even2ways : int list -> bool = <fun>
val is_even : int -> bool = <fun>
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Here is an example of a case that is not matched:

```
[]
val head : 'a list -> 'a = <fun>
val first : 'a * 'b * 'c -> 'a = <fun>
val first' : 'a * 'b * 'c -> 'a = <fun>
val first'' : 'a * 'b * 'c -> 'a = <fun>
-( 13:54:57 )-< command 23 >-----{ counter: 0 }-
utop #
```

Arg	Array	ArrayLabels	Assert_failure	Bigarray	Buffer	Bytes	BytesLabels	Callbac
-----	-------	-------------	----------------	----------	--------	-------	-------------	---------