

Last login: Wed Jan 24 15:43:51 on ttys004

carbon:\$ utop

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

Type #utop_help for help about using utop.

```
-( 15:49:47 )-< command 0 >-----{ counter: 0 }-
utop # #use "simple.ml";;
val inc_v1 : int -> int = <fun>
val inc_v2 : int -> int = <fun>
val square : int -> int = <fun>
val cube : int -> int = <fun>
val add : int -> int -> int = <fun>
val inc_v3 : int -> int = <fun>
val add3 : int -> int -> int -> int = <fun>
val greater : 'a -> 'a -> 'a = <fun>
val circle_area : float -> float = <fun>
val power : int -> float -> float = <fun>
val power_v2 : int -> float -> float = <fun>
val cube : float -> float = <fun>
val foo : float = 13.824
val bar : float = 13.824
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 even : int -> bool = <fun>
val string_concat : string -> string list -> string = <fun>
-( 15:49:47 )-< command 1 >-----{ counter: 0 }-
utop # string_concat "," ["a"; "b"; "c"] ;;
- : string = "a,b,c"
-( 15:49:49 )-< command 2 >-----{ counter: 0 }-
utop # string_concat "," ["a"] ;;
- : string = "a"
-( 15:50:15 )-< command 3 >-----{ counter: 0 }-
utop # string_concat "," [] ;;
- : string = ""
-( 15:50:19 )-< command 4 >-----{ counter: 0 }-
utop # let x1::rest = 1::2::3::[] ;;
Characters 4-12:
Warning 8: this pattern-matching is not exhaustive.
Here is an example of a case that is not matched:
[]
val x1 : int = 1
val rest : int list = [2; 3]
-( 15:50:22 )-< command 5 >-----{ counter: 0 }-
utop # x1 ;;
- : int = 1
```

```

-( 15:59:27 )-< command 6 >-----{ counter: 0 }-
utop # let m = (1::2::3::[]) :: (4::5::6::[]) :: [] ;;
val m : int list list = [[1; 2; 3]; [4; 5; 6]]
-( 15:59:56 )-< command 7 >-----{ counter: 0 }-
utop # let (x1::x2)::rest = m ;;

```

Characters 4-18:

Warning 8: this pattern-matching is not exhaustive.

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

```

([],::_|[])
val x1 : int = 1
val x2 : int list = [2; 3]
val rest : int list list = [[4; 5; 6]]
-( 16:00:31 )-< command 8 >-----{ counter: 0 }-
utop # #use "simple.ml";;
val inc_v1 : int -> int = <fun>
val inc_v2 : int -> int = <fun>
val square : int -> int = <fun>
val cube : int -> int = <fun>
val add : int -> int -> int = <fun>
val inc_v3 : int -> int = <fun>
val add3 : int -> int -> int -> int = <fun>
val greater : 'a -> 'a -> 'a = <fun>
val circle_area : float -> float = <fun>
val power : int -> float -> float = <fun>
val power_v2 : int -> float -> float = <fun>
val cube : float -> float = <fun>
val foo : float = 13.824
val bar : float = 13.824
val gcd : int -> int -> int = <fun>
val all : bool list -> bool = <fun>
val even2ways : int list -> bool = <fun>
val even : int -> bool = <fun>
val sum : int list -> int = <fun>
val string_concat : string -> string list -> string = <fun>
-( 16:01:47 )-< command 9 >-----{ counter: 0 }-
utop # not ;;
- : bool -> bool = <fun>
-( 16:08:03 )-< command 10 >-----{ counter: 0 }-
utop # #use "simple.ml";;
val inc_v1 : int -> int = <fun>
val inc_v2 : int -> int = <fun>
val square : int -> int = <fun>
val cube : int -> int = <fun>
val add : int -> int -> int = <fun>
val inc_v3 : int -> int = <fun>
val add3 : int -> int -> int -> int = <fun>
val greater : 'a -> 'a -> 'a = <fun>
val circle_area : float -> float = <fun>
val power : int -> float -> float = <fun>
val power_v2 : int -> float -> float = <fun>

```

```

val cube : float -> float = <fun>
val foo : float = 13.824
val bar : float = 13.824
val gcd : int -> int -> int = <fun>
val all : bool list -> bool = <fun>
val even2ways : int list -> bool = <fun>
val even : int -> bool = <fun>
val sum : int list -> int = <fun>
val string_concat : string -> string list -> string = <fun>
val is_empty : 'a list -> bool = <fun>
val is_empty' : 'a list -> bool = <fun>
val not_empty : 'a list -> bool = <fun>
val not_empty'' : 'a list -> bool = <fun>
-( 16:11:44 )-< command 11 >-----{ counter: 0 }-
utop # sum ;;
- : int list -> int = <fun>
-( 16:12:35 )-< command 12 >-----{ counter: 0 }-
utop # #use "simple.ml";;
val inc_v1 : int -> int = <fun>
val inc_v2 : int -> int = <fun>
val square : int -> int = <fun>
val cube : int -> int = <fun>
val add : int -> int -> int = <fun>
val inc_v3 : int -> int = <fun>
val add3 : int -> int -> int -> int = <fun>
val greater : 'a -> 'a -> 'a = <fun>
val circle_area : float -> float = <fun>
val power : int -> float -> float = <fun>
val power_v2 : int -> float -> float = <fun>
val cube : float -> float = <fun>
val foo : float = 13.824
val bar : float = 13.824
val gcd : int -> int -> int = <fun>
val all : bool list -> bool = <fun>
val even2ways : int list -> bool = <fun>
val even : int -> bool = <fun>
val sum : int list -> int = <fun>
val string_concat : string -> string list -> string = <fun>
val is_empty : 'a list -> bool = <fun>
val is_empty' : 'a list -> bool = <fun>
val not_empty : 'a list -> bool = <fun>
val not_empty'' : 'a list -> bool = <fun>
val sum : int list -> int = <fun>
val length : 'a list -> int = <fun>
-( 16:14:23 )-< command 13 >-----{ counter: 0 }-
utop # #use "simple.ml";;
val inc_v1 : int -> int = <fun>
val inc_v2 : int -> int = <fun>
val square : int -> int = <fun>
val cube : int -> int = <fun>

```

```

val add : int -> int -> int = <fun>
val inc_v3 : int -> int = <fun>
val add3 : int -> int -> int -> int = <fun>
val greater : 'a -> 'a -> 'a = <fun>
val circle_area : float -> float = <fun>
val power : int -> float -> float = <fun>
val power_v2 : int -> float -> float = <fun>
val cube : float -> float = <fun>
val foo : float = 13.824
val bar : float = 13.824
val gcd : int -> int -> int = <fun>
val all : bool list -> bool = <fun>
val even2ways : int list -> bool = <fun>
val even : int -> bool = <fun>
val sum : int list -> int = <fun>
val string_concat : string -> string list -> string = <fun>
val is_empty : 'a list -> bool = <fun>
val is_empty' : 'a list -> bool = <fun>
val not_empty : 'a list -> bool = <fun>
val not_empty'' : 'a list -> bool = <fun>
val sum : int list -> int = <fun>
val length : 'a list -> int = <fun>
-( 16:15:09 )-< command 14 >-----{ counter: 0 }-
utop # String.length ;;
- : string -> int = <fun>
-( 16:18:18 )-< command 15 >-----{ counter: 0 }-
utop # m ;;
- : int list list = [[1; 2; 3]; [4; 5; 6]]
-( 16:18:49 )-< command 16 >-----{ counter: 0 }-
utop # length ;;
- : 'a list -> int = <fun>
-( 16:21:02 )-< command 17 >-----{ counter: 0 }-
utop # length m ;;
- : int = 2
-( 16:21:07 )-< command 18 >-----{ counter: 0 }-
utop # [] ;;
- : 'a list = []
-( 16:21:56 )-< command 19 >-----{ counter: 0 }-
utop # [[]] ;;
- : 'a list list = [[]]
-( 16:28:57 )-< command 20 >-----{ counter: 0 }-
utop # List.fold_left ;;
- : ('a -> 'b -> 'a) -> 'a -> 'b list -> 'a = <fun>
-( 16:29:12 )-< command 21 >-----{ counter: 0 }-
utop # List.fold ;;
Error: Unbound value List.fold
-( 16:29:51 )-< command 22 >-----{ counter: 0 }-
utop #

```