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Last login: Wed Jan 25 13:24:38 on ttys009
carbon:public-class-repo$ utop
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        Welcome to utop version 1.14 (using OCaml version 4.01.0)!

Type #utop_help for help about using utop.

─( 18:00:00 )─< command 0 >──────────────────────────────────────{ counter: 0 }─
utop # #use "jan_25.ml";;
val is_empty_1 : 'a list -> bool = <fun>
val is_empty_2 : 'a list -> bool = <fun>
val is_empty3 : 'a list -> bool = <fun>
─( 13:32:52 )─< command 1 >──────────────────────────────────────{ counter: 0 }─
utop # is_empty_1 [1;2;3] ;;
- : bool = false
─( 13:37:33 )─< command 2 >──────────────────────────────────────{ counter: 0 }─
utop # is_empty_1 ['c'; 'b'; 'e' ;;
Error: Syntax error
─( 13:38:05 )─< command 3 >──────────────────────────────────────{ counter: 0 }─
utop # is_empty_1 ['c'; 'b'; 'e'] ;;
- : bool = false
─( 13:38:14 )─< command 4 >──────────────────────────────────────{ counter: 0 }─
utop # is_empty_1 ['c'; 'b'; 1 ] ;;
Error: This expression has type int but an expression was expected of type char
─( 13:38:17 )─< command 5 >──────────────────────────────────────{ counter: 0 }─
utop # #use "jan_25.ml";;
val is_empty_1 : 'a list -> bool = <fun>
val is_empty_2 : 'a list -> bool = <fun>
val is_empty3 : 'a list -> bool = <fun>
File "jan_25.ml", line 12, characters 2-49:
Warning 8: this pattern-matching is not exhaustive.
Here is an example of a value that is not matched:
[]
val head : 'a list -> 'a = <fun>
─( 13:38:35 )─< command 6 >──────────────────────────────────────{ counter: 0 }─
utop # #use "jan_25.ml";;
val is_empty_1 : 'a list -> bool = <fun>
val is_empty_2 : 'a list -> bool = <fun>
val is_empty3 : 'a list -> bool = <fun>
val head : 'a option list -> 'a option = <fun>
─( 13:46:21 )─< command 7 >──────────────────────────────────────{ counter: 0 }─
utop # #use "jan_25.ml";;
val is_empty_1 : 'a list -> bool = <fun>
val is_empty_2 : 'a list -> bool = <fun>
val is_empty3 : 'a list -> bool = <fun>
val head : 'a list -> 'a option = <fun>
─( 13:47:07 )─< command 8 >──────────────────────────────────────{ counter: 0 }─
utop # head [1;2;3] ;;
- : int option = Some 1
─( 13:48:29 )─< command 9 >──────────────────────────────────────{ counter: 0 }─
utop # head [] ;;
- : 'a option = None
```

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─( 13:48:48 )─< command 10 >──────────────────────────────────{ counter: 0 }─
utop # #use "jan_25.ml";;
val is_empty_1 : 'a list -> bool = <fun>
val is_empty_2 : 'a list -> bool = <fun>
val is_empty3 : 'a list -> bool = <fun>
val head : 'a list -> 'a option = <fun>
val head' : 'a list -> 'a = <fun>
─( 13:48:54 )─< command 11 >──────────────────────────────────{ counter: 0 }─
utop # head' [1;2] ;;
- : int = 1
─( 13:51:06 )─< command 12 >──────────────────────────────────{ counter: 0 }─
utop # head' [] ;;
Exception: Failure "hey, genius, your list was empty".
─( 13:51:32 )─< command 13 >──────────────────────────────────{ counter: 0 }─
utop # List.hd ;;
- : 'a list -> 'a = <fun>
─( 13:51:36 )─< command 14 >──────────────────────────────────{ counter: 0 }─
utop # List.hd [] ;;
Exception: Failure "hd".
─( 13:51:50 )─< command 15 >──────────────────────────────────{ counter: 0 }─
utop # #use "jan_25.ml";;
File "jan_25.ml", line 24, characters 9-14:
Error: Syntax error: pattern expected.
─( 13:51:54 )─< command 16 >──────────────────────────────────{ counter: 0 }─
utop # #use "jan_25.ml";;
val is_empty_1 : 'a list -> bool = <fun>
val is_empty_2 : 'a list -> bool = <fun>
val is_empty3 : 'a list -> bool = <fun>
val head : 'a list -> 'a option = <fun>
val head' : 'a list -> 'a = <fun>
val drop_value : 'a -> 'a list -> 'a list = <fun>
─( 13:58:25 )─< command 17 >──────────────────────────────────{ counter: 0 }─
utop # drop_value 2 [1;2;3] ;;
Stack overflow during evaluation (looping recursion?).
─( 13:59:04 )─< command 18 >──────────────────────────────────{ counter: 0 }─
utop # #use "jan_25.ml";;
val is_empty_1 : 'a list -> bool = <fun>
val is_empty_2 : 'a list -> bool = <fun>
val is_empty3 : 'a list -> bool = <fun>
val head : 'a list -> 'a option = <fun>
val head' : 'a list -> 'a = <fun>
val drop_value : 'a -> 'a list -> 'a list = <fun>
─( 13:59:09 )─< command 19 >──────────────────────────────────{ counter: 0 }─
utop # drop_value 2 [1;2;3] ;;
- : int list = [1; 3]
─( 13:59:24 )─< command 20 >──────────────────────────────────{ counter: 0 }─
utop # (1, "hello") ;;
- : int * string = (1, "hello")
─( 13:59:25 )─< command 21 >──────────────────────────────────{ counter: 0 }─
utop # (1, "hello", 'x') ;;
- : int * string * char = (1, "hello", 'x')
─( 14:08:08 )─< command 22 >──────────────────────────────────{ counter: 0 }─
utop # match (1, "hello", 'x') with
```

```
       | (e1, e2, e3) -> e1 + 40
;;
- : int = 41
─( 14:08:21 )─< command 23 >──────────────────────────────────────{ counter: 0 }─
utop # let fsttre triple = match triple with
       | (e1, e2, e3) -> e1
;;
val fsttre : 'a * 'b * 'c -> 'a = <fun>
─( 14:09:30 )─< command 24 >──────────────────────────────────────{ counter: 0 }─
utop #
```

Arg	Arith_status	Array	ArrayLabels	Assert_failure	Big_int	Bigarray	Buffer	Call