

Last login: Mon Jan 22 13:22:57 on ttys008

carbon:\$ utop

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

Type #utop_help for help about using utop.

```
-( 13:28:43 )-< 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>
File "simple.ml", line 26, characters 48-53:
Error: Unbound value power
-( 13:28:43 )-< command 1 >-----{ 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 -> int -> int = <fun>
-( 13:28:56 )-< command 2 >-----{ 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>
-( 13:29:40 )-< command 3 >-----{ counter: 0 }-
utop # power 3 3.0 ;;
- : float = 27.
-( 13:30:24 )-< command 4 >-----{ counter: 0 }-
utop # power 0 3.0 ;;
Stack overflow during evaluation (looping recursion?).
-( 13:30:41 )-< command 5 >-----{ 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>
```

File "simple.ml", line 29, characters 24-37:

Error: This expression has type int but an expression was expected of type float

```
-( 13:32:05 )-< command 6 >-----{ 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>
```

```
-( 13:32:41 )-< command 7 >-----{ counter: 0 }-
```

```
utop # power -2 16.0 ;;
```

Error: This expression has type int -> float -> float
but an expression was expected of type int

```
-( 13:34:08 )-< command 8 >-----{ counter: 0 }-
```

```
utop # power ~2 16.0 ;;
```

Error: Syntax error

```
-( 13:34:15 )-< command 9 >-----{ counter: 0 }-
```

```
utop # power (0-2) 16.0 ;;
```

```
- : float = 0.00390625
```

```
-( 13:34:20 )-< 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>
```

File "simple.ml", line 34, characters 19-20:

Error: Unbound value x

```
-( 13:34:28 )-< command 11 >-----{ 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 cube : float -> float = <fun>
-( 13:42:25 )-< command 12 >-----{ counter: 0 }-
utop # cube 3.0 ;;
- : float = 27.
-( 13:42:43 )-< 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 cube : float -> float = <fun>
val flip : ('a -> 'b -> 'c) -> 'b -> 'a -> 'c = <fun>
-( 13:42:43 )-< command 14 >-----{ counter: 0 }-
utop # cube ;;
- : float -> float = <fun>
-( 13:49:56 )-< command 15 >-----{ counter: 0 }-
utop # (power 3) 3.0 ;;
- : float = 27.
-( 13:49:59 )-< command 16 >-----{ counter: 0 }-
utop # cube 2 ;;
Error: This expression has type int but an expression was expected of type
      float
-( 13:50:20 )-< command 17 >-----{ counter: 0 }-
utop # cube 2.0 ;;
- : float = 8.
-( 13:50:28 )-< command 18 >-----{ counter: 0 }-
utop # #use "simple.ml";;
File "simple.ml", line 41, characters 6-8:
Error: Syntax error
-( 13:50:32 )-< command 19 >-----{ 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 cube : float -> float = <fun>
val gcd : int -> int -> int = <fun>
-( 13:58:48 )-< command 20 >-----{ counter: 0 }-
utop # gcd 10 8 ;;
- : int = 2
-( 13:59:00 )-< command 21 >-----{ counter: 0 }-
utop # f ;;
Error: Unbound value f
-( 13:59:14 )-< command 22 >-----{ 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 cube : float -> float = <fun>
val gcd : int -> int -> int = <fun>
val sum : int list -> int = <fun>
-( 13:59:43 )-< command 23 >-----{ counter: 0 }-
utop # sum [1;2;3;4] ;;
- : int = 10
-( 14:11:31 )-< command 24 >-----{ 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 cube : float -> float = <fun>
val gcd : int -> int -> int = <fun>
val sum : int list -> int = <fun>
val all : bool list -> bool = <fun>
-( 14:11:38 )-< command 25 >-----{ counter: 0 }-
utop # all [true; true] ;;
- : bool = true
-( 14:12:42 )-< command 26 >-----{ counter: 0 }-
utop # all [true; false] ;;
- : bool = false
-( 14:12:50 )-< command 27 >-----{ 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 cube : float -> float = <fun>
val gcd : int -> int -> int = <fun>
val sum : int list -> int = <fun>
val all : bool list -> bool = <fun>

```

File "simple.ml", line 62, characters 27-36:

Error: Unbound value even2ways

Hint: Did you mean even2way?

-(14:12:53)-< command 28 >-----{ 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 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>

```

-(14:17:04)-< command 29 >-----{ counter: 0 }-

utop # even2ways [2;4;6;8] ;;

- : bool = true

-(14:17:14)-< command 30 >-----{ counter: 0 }-

utop # even2ways [2;4;8] ;;

- : bool = false

-(14:17:21)-< command 31 >-----{ counter: 0 }-

utop #

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