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Last login: Mon Jan 29 15:42:36 on ttys006
carbon:$ pwd
/project/evw/Teaching/18_Spring_2041/carbon-repos/public-class-repo/Sample Program
s/Sec_01_1-25pm
carbon:$ uto
-bash: uto: command not found
carbon:$ utop
                Welcome to utop version 2.0.2 (using OCaml version 4.06.0)!

Type #utop_help for help about using utop.

─( 13:38:03 )─< command 0 >──────────────────────────────{ counter: 0 }─
utop # #use "find_and_lookup.ml";;
val m : (string * int) list =
  [("dog", 1); ("chicken", 2); ("dog", 3); ("cat", 5)]
val lookup_all : 'a -> ('a * 'b) list -> 'b list = <fun>
val find_all_by : ('a -> 'b -> bool) -> 'a -> 'b list -> 'b list =
  <fun>
─( 13:38:08 )─< command 1 >──────────────────────────────{ counter: 0 }─
utop # find_all_by (fun x y -> x = y) 5 [ 1;2;3;4;5;6;5;4;5;6;7] ;;
- : int list = [5; 5; 5]
─( 13:38:08 )─< command 2 >──────────────────────────────{ counter: 0 }─
utop # find_all_by (fun x y -> x > y) 5 [ 1;2;3;4;5;6;5;4;5;6;7] ;;
- : int list = [1; 2; 3; 4; 4]
─( 13:39:25 )─< command 3 >──────────────────────────────{ counter: 0 }─
utop # find_all_by (fun x y -> x < y) 5 [ 1;2;3;4;5;6;5;4;5;6;7] ;;
- : int list = [6; 6; 7]
─( 13:39:53 )─< command 4 >──────────────────────────────{ counter: 0 }─
utop # find_all_by (fun ch n -> n = Char.code ch) 'z' [92;93;94;95;96;97;98;99;100
] ;;
- : int list = []
─( 13:40:18 )─< command 5 >──────────────────────────────{ counter: 0 }─
utop # Char.code ;;
- : char -> int = <fun>
─( 13:43:02 )─< command 6 >──────────────────────────────{ counter: 0 }─
utop # Char.code 'z'  ;;
- : int = 122
─( 13:43:10 )─< command 7 >──────────────────────────────{ counter: 0 }─
utop # find_all_by (fun ch n -> n = Char.code ch) 'z' [92;93;94;95;96;97;98;99;100
;122;123;122] ;;
- : int list = [122; 122]
─( 13:43:10 )─< command 8 >──────────────────────────────{ counter: 0 }─
utop # #use "find_and_lookup.ml";;
val m : (string * int) list =
  [("dog", 1); ("chicken", 2); ("dog", 3); ("cat", 5)]
val lookup_all : 'a -> ('a * 'b) list -> 'b list = <fun>
val find_all_by : ('a -> 'a -> bool) -> 'a -> 'a list -> 'a list =
  <fun>
─( 13:43:23 )─< command 9 >──────────────────────────────{ counter: 0 }─
utop # find_all_by (fun x y -> x = y) 5 [ 1;2;3;4;5;6;5;4;5;6;7] ;;
- : int list = [5; 5; 5]
─( 13:44:21 )─< command 10 >─────────────────────────────{ counter: 0 }─
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utop # find_all_by (=) 5 [ 1;2;3;4;5;6;5;4;5;6;7] ;;
- : int list = [5; 5; 5]
—( 13:46:04 )—< command 11 >———————————————————{ counter: 0 }—
utop # (=) ;;
- : 'a -> 'a -> bool = <fun>
—( 13:46:19 )—< command 12 >———————————————————{ counter: 0 }—
utop # find_all_by (>) 5 [ 1;2;3;4;5;6;5;4;5;6;7] ;;
- : int list = [1; 2; 3; 4; 4]
—( 13:46:22 )—< command 13 >———————————————————{ counter: 0 }—
utop # (+) ;;
- : int -> int -> int = <fun>
—( 13:46:33 )—< command 14 >———————————————————{ counter: 0 }—
utop # ( *
 ) ;;
- : int -> int -> int = <fun>
—( 13:47:38 )—< command 15 >———————————————————{ counter: 0 }—
utop # List.sort ;;
- : ('a -> 'a -> int) -> 'a list -> 'a list = <fun>
—( 13:47:49 )—< command 16 >———————————————————{ counter: 0 }—
utop # 1 + 3 :: [] ;;
- : int list = [4]
—( 13:49:21 )—< command 17 >———————————————————{ counter: 0 }—
utop # let find_all = find_all_by (=) ;;
val find_all : '_weak1 -> '_weak1 list -> '_weak1 list = <fun>
—( 13:57:49 )—< command 18 >———————————————————{ counter: 0 }—
utop # let find_all elem lst = find_all_by (=) elem lst ;;
val find_all : 'a -> 'a list -> 'a list = <fun>
—( 13:59:46 )—< command 19 >———————————————————{ counter: 0 }—
utop # (=) ;;
- : 'a -> 'a -> bool = <fun>
—( 14:00:42 )—< command 20 >———————————————————{ counter: 0 }—
utop # (fun x -> x + 1) = (fun y -> 1 + y)
;;
Exception: Invalid_argument "compare: functional value".
—( 14:01:14 )—< command 21 >———————————————————{ counter: 0 }—
utop # #use "find_and_lookup.ml";;
val m : (string * int) list =
  [("dog", 1); ("chicken", 2); ("dog", 3); ("cat", 5)]
val lookup_all : 'a -> ('a * 'b) list -> 'b list = <fun>
val find_all_by : ('a -> 'b -> bool) -> 'a -> 'b list -> 'b list =
  <fun>
val find_all_with : ('a -> bool) -> 'a list -> 'a list = <fun>
val find_all_by' : ('a -> 'b -> bool) -> 'a -> 'b list -> 'b list =
  <fun>
val find_all_with' : ('a -> bool) -> 'a list -> 'a list = <fun>
—( 14:15:31 )—< command 22 >———————————————————————{ counter: 0 }—
utop # find_all_by (>) 5 [ 1;2;3;4;5;6;5;4;5;6;7] ;;
- : int list = [1; 2; 3; 4; 4]
—( 14:15:31 )—< command 23 >———————————————————————{ counter: 0 }—
utop # find_all_by' (>) 5 [ 1;2;3;4;5;6;5;4;5;6;7] ;;
- : int list = [1; 2; 3; 4; 4]
—( 14:16:08 )—< command 24 >———————————————————————{ counter: 0 }—
utop # find_all_with (fun x -> x = 4) [1;2;3;4;5;4;5;6] ;;
- : int list = [4; 4]
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─( 14:16:14 )─< command 25 >──────────────────────────────────────{ counter: 0 }─
utop # find_all_with' (fun x -> x = 4) [1;2;3;4;5;4;5;6] ;;
- : int list = [4; 4]
─( 14:16:39 )─< command 26 >──────────────────────────────────────{ counter: 0 }─
utop #
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Arg	Array	ArrayLabels	Assert_failure	Bigarray	Buffer	Bytes	BytesLabels	Callback	