Last login: Wed Feb 7 13:24:33 on ttys005 carbon: \$\text{utop}

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

Type #utop_help for help about using utop.

```
utop # String.sub ;;
- : string -> int -> int -> string = <fun>
utop # #use "higher_order.ml";;
val implode : char list -> string = <fun>
val explode : string -> char list = <fun>
val map : ('a -> 'b) -> 'a list -> 'b list = <fun>
val filter: ('a -> bool) -> 'a list -> 'a list = <fun>
val filter' : ('a -> bool) -> 'a list -> 'a list = <fun>
val filter_out : ('a -> bool) -> 'a list -> 'a list = <fun>
val foldl : ('b -> 'a -> 'b) -> 'b -> 'a list -> 'b = <fun>
val foldr : ('a -> 'b -> 'b) -> 'a list -> 'b -> 'b = <fun>
val inc_all_by : int -> int list -> int list = <fun>
val removeABCD : char list -> char list = <fun>
utop # #use "higher order.ml";;
val implode : char list -> string = <fun>
val explode : string -> char list = <fun>
val map : ('a -> 'b) -> 'a list -> 'b list = <fun>
val filter: ('a -> bool) -> 'a list -> 'a list = <fun>
val filter' : ('a -> bool) -> 'a list -> 'a list = <fun>
val filter out : ('a -> bool) -> 'a list -> 'a list = <fun>
val foldl : ('b -> 'a -> 'b) -> 'b -> 'a list -> 'b = <fun>
val foldr : ('a -> 'b -> 'b) -> 'a list -> 'b -> 'b = <fun>
val f : 'a -> 'a list -> 'a list = <fun>
val rev : 'a list -> 'a list = <fun>
val inc all by : int -> int list -> int list = <fun>
val removeABCD : char list -> char list = <fun>
utop # rev [1;2;3] ;;
-: int list = [1; 2; 3]
utop # #use "higher_order.ml";;
val implode : char list -> string = <fun>
val explode : string -> char list = <fun>
val map : ('a -> 'b) -> 'a list -> 'b list = <fun>
```

```
val filter: ('a -> bool) -> 'a list -> 'a list = <fun>
val filter': ('a -> bool) -> 'a list -> 'a list = <fun>
val filter out : ('a -> bool) -> 'a list -> 'a list = <fun>
val foldl : ('b -> 'a -> 'b) -> 'b -> 'a list -> 'b = <fun>
val f : 'a list -> 'a -> 'a list = <fun>
val rev : 'a list -> 'a list = <fun>
val foldr : ('a -> 'b -> 'b) -> 'a list -> 'b -> 'b = <fun>
val inc_all_by : int -> int list -> int list = <fun>
val removeABCD : char list -> char list = <fun>
                                   _____{ counter: 0 }-
-( 13:45:21 )-< command 5 >----
utop # rev [1;2;3] ;;
-: int list = [3; 2; 1]
utop # List.fold left ;;
- : ('a -> 'b -> 'a) -> 'a -> 'b list -> 'a = <fun>
utop # #use "higher order.ml"::
val implode : char list -> string = <fun>
val explode : string -> char list = <fun>
val map : ('a -> 'b) -> 'a list -> 'b list = <fun>
val filter: ('a -> bool) -> 'a list -> 'a list = <fun>
val filter' : ('a -> bool) -> 'a list -> 'a list = <fun>
val filter out : ('a -> bool) -> 'a list -> 'a list = <fun>
val foldl : ('b -> 'a -> 'b) -> 'b -> 'a list -> 'b = <fun>
val foldr : ('a -> 'b -> 'b) -> 'a list -> 'b -> 'b = <fun>
val inc all by : int -> int list -> int list = <fun>
val removeABCD : char list -> char list = <fun>
utop # #use "group_by_3.ml";;
val partition : ('a -> bool) -> 'a list -> 'a list * 'a list =
 <fun>
utop # #use "group by 3.ml";;
val even : int -> bool = <fun>
val ns : int list = [1; 2; 3; 4; 5; 6; 7; 8; 9; 10]
val partition : ('a \rightarrow bool) \rightarrow 'a list \rightarrow 'a list * 'a list =
 <fun>
utop # partition even ns ;;
-: int list * int list =([10; 8; 6; 4; 2], [9; 7; 5; 3; 1])
utop # #use "group by 3.ml";;
val even : int -> bool = <fun>
val ns : int list = [1; 2; 3; 4; 5; 6; 7; 8; 9; 10]
val partition : ('a -> bool) -> 'a list -> 'a list * 'a list =
```

```
<fun>
utop # partition even ns ;;
-: int list * int list =([2; 4; 6; 8; 10], [1; 3; 5; 7; 9])
                                _____{ counter: 0 }_
-( 14:03:26 )-< command 13 >----
utop # #use "group_by_3.ml";;
val even : int -> bool = <fun>
val ns : int list = [1; 2; 3; 4; 5; 6; 7; 8; 9; 10]
val partition : ('a -> bool) -> 'a list -> 'a list * 'a list =
 <fun>
val append : 'a list -> 'a list = <fun>
utop # partition even ns ;;
-: int list * int list =([2; 4; 6; 8; 10], [1; 3; 5; 7; 9])
-( 14:05:30 )-< command 15 >----
                               _____{ counter: 0 }_
utop # List.fold left ::
- : ('a -> 'b -> 'a) -> 'a -> 'b list -> 'a = <fun>
utop # #use "group_by_3.ml";;
val even : int -> bool = <fun>
val ns : int list = [1; 2; 3; 4; 5; 6; 7; 8; 9; 10]
val partition : ('a \rightarrow bool) \rightarrow 'a list \rightarrow 'a list * 'a list =
 <fun>
val append : 'a list -> 'a list -> 'a list = <fun>
val group by 3: 'a list -> 'a list list * 'a list * int = <fun>
utop # group by 3 ns ;;
-: int list list * int list * int
= ([[9; 8; 7]; [6; 5; 4]; [3; 2; 1]], [10], 1)
                                   _____{ counter: 0 }-
-( 14:13:46 )-< command 18 >----
utop # #use "group by 3.ml";;
val even : int -> bool = <fun>
val ns : int list = [1; 2; 3; 4; 5; 6; 7; 8; 9; 10]
val partition : ('a -> bool) -> 'a list -> 'a list * 'a list =
 <fun>
val append : 'a list -> 'a list -> 'a list = <fun>
val group_by_3 : 'a list -> 'a list list = <fun>
utop # group by 3 ns ;;
-: int list list = [[10]; [9; 8; 7]; [6; 5; 4]; [3; 2; 1]]
utop # #use "group by 3.ml";;
val even : int -> bool = <fun>
val ns : int list = [1; 2; 3; 4; 5; 6; 7; 8; 9; 10]
val partition : ('a -> bool) -> 'a list -> 'a list * 'a list =
```

```
<fun>
val append : 'a list -> 'a list -> 'a list = <fun>
val group_by_3 : 'a list -> 'a list list = <fun>
-( 14:15:02 ) -< command 21 > ______ { counter: 0 } -

utop # group_by_3 ns ;;
- : int list list = [[1; 2; 3]; [4; 5; 6]; [7; 8; 9]; [10]]
-( 14:15:46 ) -< command 22 > ______ { counter: 0 } -

utop #

Arg Array ArrayLabels Assert_failure Bigarray Buffer Bytes BytesLa
```