

```
Desktop: utop

-( 21:36:37 )< command 0 >-----{ counter: 0 }-
utop # let split(list, number)=
  let rec split1(list, number, lesser, greater)=
    match list with
    | [] -> (List.rev lesser, List.rev greater)
    | head::tail ->
      match (head <= number) with
      | true -> split1(tail,number,head::lesser,greater)
      | false -> split1(tail,number,lesser,head::greater)
  in split1(list, number, [], []);;
val split : 'a list * 'a -> 'a list * 'a list = <fun>
-( 21:36:37 )< command 1 >-----{ counter: 0 }-
utop #
let rec quicksort l =
match l with
| [] -> []
| [x] -> [x]
| h :: tl ->
let (l, r) = split (tl, h) in
(quicksort l) @ (h :: quicksort r);;
val quicksort : 'a list -> 'a list = <fun>
-( 21:36:51 )< command 2 >-----{ counter: 0 }-
-( 21:36:51 )< command 2 >-----{ counter: 0 }-
utop # quicksort [2;5;1;7;3;9;3;0;10];;
- : int list = [0; 1; 2; 3; 3; 5; 7; 9; 10]
-( 21:36:51 )< command 3 >-----{ counter: 0 }-
utop # quicksort [2;5;1;7;3435;4359;343;660;10];;
- : int list = [1; 2; 5; 7; 10; 343; 660; 3435; 4359]
-( 21:37:12 )< command 4 >-----{ counter: 0 }-
utop # quicksort [];;
- : 'a list = []
-( 21:37:16 )< command 5 >-----{ counter: 0 }-
utop # quicksort [1;2;1;2;1;2];;
- : int list = [1; 1; 1; 2; 2; 2]
-( 21:37:26 )< command 6 >-----{ counter: 0 }-
utop # |

Afl_instrument | Alias_analysis | Allocated_const | Annot | Arch | Arg | Arg_helper | Array
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1 let split(list, number)=
2   let rec split1(list, number, lesser, greater)=
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3     match list with
4     | [] -> (List.rev lesser, List.rev greater)
5     | head::tail ->
6         match (head <= number) with
7         | true  -> split1(tail,number,head::lesser,greater)
8         | false -> split1(tail,number,lesser,head::greater)
9     in split1(list, number, [], []);;
10
11
12 let rec quicksort l =
13     match l with
14     | [] -> []
15     | [x] -> [x]
16     | h :: tl ->
17         let (l, r) = split (tl, h) in
18         (quicksort l) @ (h :: quicksort r);;
19
20 quicksort [2;5;1;7;3;9;3;0;10];;
21
22 quicksort [2;5;1;7;3435;4359;343;660;10];;
23
24 quicksort [];;
25
26 quicksort [1;2;1;2;1;2];;
27
```