1. [8 pts] Give the type of the following OCaml expression. If there is a type error, write "error" and briefly explain why.

(a) "one"::[2;3]

(b) let z = 7 in ("z", z)

(c) fun x y -> if x > y then (x,y) else (y,x)

(d) fun g a b -> a::(g b)

2. [6 pts] Give an OCaml expression of the following type without using type annotations.

(a) int -> int -> int

(b) 'a -> 'b -> 'b * 'a list

(c) (string -> string) -> string
3. [6 pts] What is the value of the following OCaml expression?

(a) ```
let x = 5 in
let y = 4 in
let x = 3 in
(if x<y then x*y else x/y)
``` 

(b) ```
let rec f1 l c = match l with
  | [] -> c
  | h::t -> (h*c) + (f1 t (c-1))
in f1 [1;2;3;4] 5
```