Concurrent ML

Exercise 5: Swap Channels

1 Goal

Write a structure Swap that implements the following signature:

```
signature SWAP_CHANNEL =
sig

(* swap channels *)

type 'a swap_chan

(* create a swap channel *)

val swapChannel : unit -> 'a swap_chan

(* swapEvt(ch, x) returns an event that, when synchonized with, swaps
   x with a thread that is synchronizing on an event of the form
   swapEvt(ch, y); the synchronization on swapEvt(ch, x) yields y, and
   the synchronization on swapEvt(ch, y) yields x *)

val swapEvt : 'a swap_chan * 'a -> 'a CML.event

end;
```

2 Submission

Bring a copy of your program, or as much of it as you are able to write, to Tuesday afternoon's exercise session, and also make it available on the WWW. Be prepared to talk about your solution during the exercise session.