```
#ifndef QUEUE_H
#define QUEUE_H

struct queue;
typedef struct queue *queue;

extern queue queue_create(void);

extern void queue_enq(queue q, void *element);

extern int queue_empty(queue q);

/* Precondition:  the queue must not be empty as reported by
   queue_empty()
   The front element of the queue is returned and deleted from
   the queue */
extern void *queue_deq(queue q);

/* return a new independent queue with the same elements as q */
extern queue queue_copy(queue q);


#endif
```