Dequeue Remove an element from a queue

#include <OSUtils.h> **Operating System Utilities**

```
OSErr       Dequeue(qEntry, theQueue);
QElemPtr    qEntry ;        address of a queue element
QHdrPtr     theQueue ;      address of a queue header
```

Dequeue removes an element from a queue, adjusting the queue links to bypass the element. The element itself is not deallocated.

qEntry is the address of a variable-length QElem structure whose size and contents depend upon the type of queue. This must be the same as a *qEntry* value used in a previous call to **Enqueue**.

theQueue is the address of a 10-byte QHdr structure. This structure contains information about the queue-some type-specific flags and pointers to the first and last element in the queue.

Returns: an OSErr; an integer Error Code. It will be one of:

noErr	(0)	No error
qErr	(-1)	Entry not in specified queue

Notes: **Dequeue** is used to remove any element from a queue. The caller is responsible for deallocating the space used by the queue element (if that memory needs to be freed).

The **Dequeue** routine turns off interrupts for critical sections of its code. This makes it ideal for queue management for interrupt-driven programs which need to be concerned about simultaneous execution and deadlock.

An example of queue usage is contained in **Enqueue**.