

test.h

```
1 typedef struct Q_DATATYPE
2 {
3     int intValue; //entertime
4 } Q_DATATYPE;
5
6 /* DATATYPE really represents the PQ datatype since it contains the user's
7 * data (Q_DATATYPE) and priority
8 *
9 * ListElement is really the List datatype.
10 */
11 typedef struct DATATYPE
12 {
13 /* union
14 {
15     char charValue;
16     unsigned int intValue;
17     float floatValue;
18 };
19 unsigned short whichOne;
20 */
21 Q_DATATYPE data;
22 int priority; // initial fuel
23
24 /* these edits break the listDriver */
25
26 // merely to silence the compiler!
27 int intValue;
28 int whichOne;
29 } DATATYPE;
30
31 typedef struct ListElement* ListElementPtr;
32 typedef struct ListElement
33 {
34     DATATYPE data;
35     ListElementPtr next;
36     ListElementPtr prev;
37 } ListElement;
38
39
40 // A list is an array of ListElements where the current pointer and number
41 // of elements are maintained at all times
42
43 typedef struct List* ListPtr;
44
45 typedef struct List
46 {
47     ListElementPtr head;
48     ListElementPtr last;
49     ListElementPtr current;
50     int numElements;
51 } List;
52
```