```
1: // filename ************ Fifo.h ********
2: // Header file for the receive FIFO (two versions)
3: // Jonathan W. Valvano 10/1/07
4:
5: //  This example accompanies the books
6: //   "Embedded Microcomputer Systems: Real Time Interfacing",
7: //        Thompson, copyright (c) 2006,
8: //   "Introduction to Embedded Microcomputer Systems:
9: //    Motorola 6811 and 6812 Simulation", Brooks-Cole, copyright (c) 2002
10:
11: // Copyright 2006 by Jonathan W. Valvano, valvano@mail.utexas.edu
12: //    You may use, edit, run or distribute this file
13: //    as long as the above copyright notice remains
14:
15:
16:
17: #include <hidef.h>      /* common defines and macros */
18: #include <mc9s12dp512.h>     /* derivative information */
19: #pragma LINK_INFO DERIVATIVE "mc9s12dp512"
20:
21: #define FIFOSIZE 24
22: /* Number of characters in the Fifo
23:     the FIFO is full when it has FifoSize-1 characters */
24: void Fifo_Init(void);
25:
26: /*-----------------------Fifo_Put---------------------------
27:   Enter one character into the fifo
28:   Inputs: 8-bit data
29:   Outputs: true if data is properly saved,
30:            false if data not saved because it was previously full*/
31: int Fifo_Put(unsigned short data);
32:
33: /*-----------------------Fifo_Get---------------------------
34:   Remove one character from the fifo
35:   Inputs: pointer to place to return 8-bit data
36:   Outputs: true if data is valid,
37:            false if fifo was empty at the time of the call*/
38: int Fifo_Get(unsigned short *datapt);
39:
40: /*-----------------------Fifo_Status---------------------------
41:   Check the status of the fifo
42:   Inputs: none
43:   Outputs: true if there is any data in the fifo */
44: int Fifo_Status(void);
45:
```