



tx-q

Data	A5
Head	0
Tail	01
Size	01

rx-q

Data	0000
Head	0
Tail	0
Size	0

Show the code you would write that would fill the transmit queue with the 0xA5 CB110F AND show the structure contents at each step of the way.

Solution

(2)

```

Q_Init(&tx-q);
Q_Init(&tx-q); ← more code
if (!Q_Enqueue(&tx-q, 0xA5)) handle_error();
if (!Q_Enqueue(&tx-q, 0xCB)) handle_error();
if (!Q_Enqueue(&tx-q, 0x11)) handle_error();
if (!Q_Enqueue(&tx-q, 0x0F)) handle_error();
    
```

tx-q	Data	A5 CB 11 0F
	Head	0
	Tail	0x780
	Size	0x239

Test Question
 what happens
 when tail == head?

then to start transmitting this data:

```

SCI0.TDR.BYTE = t;
t = Q_Dequeue(&tx-q);
if (t) SCI0.TDR.BYTE = t;
    
```

tx-q	Data	00 CB 11 0F
	Head	01
	Tail	0
	Size	3

In ISR
 else (do nothing)