

Data Structure and Algorithm

Quiz #2, Solution

Tuesday, March 5, 2013

Problem 1.

```
1 void ResizeQueue (struct DynArrayQueue *Q) {
2     int size = Q->capacity;
3     Q->capacity=Q->capacity*2;
4     Q->array=realloc(Q->array,Q->capacity);
5     if (!Q->array) {
6         printf("Error");
7         return;
8     }
9     if (Q->front > Q->rear) {
10        for (int i=0;i<Q->front;++i)
11            Q->array[_____] = Q->array[i];
12        Q->rear=_____ ;
13    }
14 }
```

Solution:

```
1 void ResizeQueue (struct DynArrayQueue *Q) {
2     int size = Q->capacity;
3     Q->capacity=Q->capacity*2;
4     Q->array=realloc(Q->array,Q->capacity);
5     if (!Q->array) {
6         printf("Error");
7         return;
8     }
9     if (Q->front > Q->rear) {
10        for (int i=0;i<Q->front;++i)
11            Q->array[i+size]=Q->array[i];
12        Q->rear=Q->rear+size;
13    }
14 }
```

兩格各 50 分。如果小錯誤給一半。