2) (10 pts) ALG (Linked Lists)

Suppose we have a queue implemented as a doubly linked list using the structures shown below. Use head for the front of the queue and tail for the end of the queue.

```
struct node {
    int data;
    struct node* next, *prev;
}

struct queue {
     int size;
     struct node *head, *tail;
}
```

Write a dequeue function for this queue. If the queue is NULL or is already empty, return 0 and take no other action. If the queue isn't empty, dequeue the appropriate value, make the necessary adjustments, and return the dequeued value. **(Note: You must free the node that previously stored the dequeued value.)**

```
int dequeue(queue *thisQ) {




}
```