

Use the Priority Queue functions to access

pointer from createPQ

```
typedef struct PriorityQueue {
    PQNode *qFront; // pointer to the first element of the queue
    PQNode *qRear; // pointer to the last element of the queue
} PriorityQueue;
```

```
typedef Department* priorityQueueType;
```

```
typedef struct PQNode {
    priorityQueueType qt; // priorityQueueType contained in this node
    int priority; // priority of node contained in this node
    struct PQNode *pNext; // pointer to the next node in the linked list
} PQNode;
```

Reminder: priorityQueueType same as

Department\*

```
typedef struct Department {
    char* name; //name of this department
    double totalSpent; //total spent on this department so far

    Queue* itemsDesired; //Queue of items desired by this department
    Queue* itemsReceived; //Queue of items received by this department
    Queue* itemsRemoved; //Queue of items not received by this department
} Department;
```

```
typedef struct Queue {
    LLNode *qFront; //pointer to the first element of the queue
    LLNode *qRear; //pointer to the last element of the queue
} Queue;
```

```
typedef struct LLNode {
    queueType qt; //queueType contained in this node (i.e. an Item* in this case)
    struct LLNode *pNext; //pointer to the next node in the linked list
} LLNode;
```

```
typedef struct Item {
    char* name; //name of this item
    double price; //price of this item
} Item;
```

Reminder: queueType is the same as Item\*

```
typedef struct Item* queueType; //This queue contains items
```

