

```
#pragma once
```

```
typedef struct _cmd_info {  
    int jobid;  
    char cmd[200];  
} cmd_info;
```

```
typedef struct _queue  
{  
    int size;          /* maximum size of the queue */  
    cmd_info *buffer; /* queue buffer */  
    int start;         /* index to the start of the queue */  
    int end;           /* index to the end of the queue */  
    int count;         /* no. of elements in the queue */  
} queue;
```

```
queue *queue_init(int n);  
int queue_insert(queue *q, cmd_info *item);  
cmd_info *queue_delete(queue *q);  
void queue_display(queue *q);  
void queue_destroy(queue *q);
```