QUEUE

- Collection of elemets
- FIFO
- FRONT and REAR ends
- EnQueue,DeQueue,Empty

ADT-Stack
Specifications for a Queue

- Void CreateQueue(Queue *q);
- Precondition:None
- Postcondition:The Queue has been created and is initialized to be empty

- Void QueueEmpty(Queue *q);
- Precondition:Queue exists and it has been initiaized
- Postcondition:Return true if the Queue is empty,False otherwise

- Void QueueFull(Queue *s);
- Precondition:Queue exists and it has been initiaized
- Postcondition:Return true if the Queue is full,False otherwise

- Void Append(QueueEntry item,Queue *s);
- Precondition:Queue exists and it is not full
- Postcondition:entry item has been stored as the last entry in the Queue

- Void Serve(QueueEntry *item,Queue *q);
- Precondition:Queue exists and it is not empty
- Postcondition:First entry has been removed and returned in *item

- Void clearQueue(Queue *q);
- Precondition:Stack exists and it has been initiaized
- Postcondition:All entries in the Queue have been deleted; Queue is empty

- int QueueSize(Queue *q);
- Precondition:Queue exists and it has been initiaized
- Postondition:The function returns the number of entries in the Queue

- Void QueueFront(QueueEntry *item,Queue *q);
- Precondition:Queue exists and it is not empty
- Postondition:The entry from the front of the Queue is placed in * item without altering the Queue contents

- Void traverseQueue(Queue q,void (*visit(QueueEntry x));
- Precondition:Queue exists and it has been initiaized
- Postondition:The function that visit points to, has been invoked for each entry in the Queue,beginning with the entry from the front and proceeding towards the rear of the Queue