Making a queue using stacks:

For making a queue, we need two stacks. An enqueue operation is performed, the new element is entered at the top of stack1. In de-queue operation, if stack2 is empty then all the elements are moved to stack2 and finally top of stack2 is returned. This basically means we take elements from one stack and place it into other stack which results in last item going down in the stack and the first element coming on the top, thus providing FIFO condition of the queue.

Pseudo Code:

enqueue(p, n)

1. Push n to stack1.

dequeue(p)

1. If both stacks are empty, then error message is popped.

2. If stack2 is empty,

While stack1 is not empty, push everything from stack1 to stack2. (This will make first element in the stack to become the top member of the other stack.)

3. Pop the element from stack2 and return it. (First in element popped out i.e. FIFO)