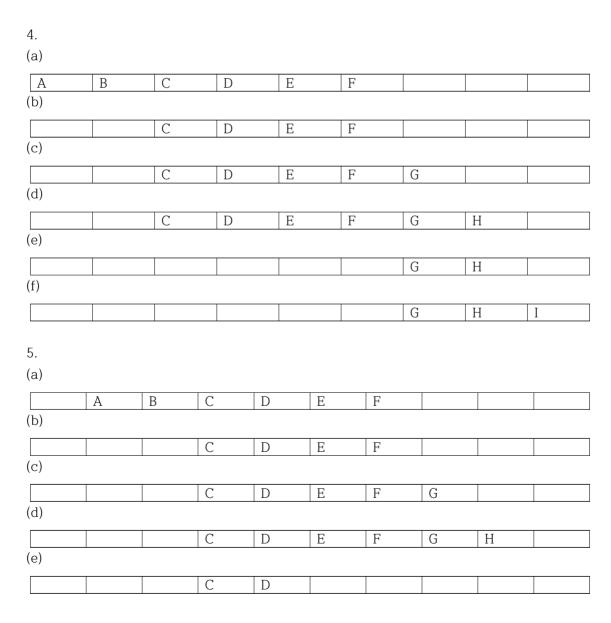
- 1. A priority queue is a data structure where each element is assigned priority. The priority of the element will be used to determine the order where the elements will be processed. And a priority queue is implemented using a linked list. They have three parts in node. 1)data part 2) part of priority number 3) the address of next node.
- 2. In circular queue, the first index comes right after the last index. When using a linear cue, even though we have space left in the cue the overflow condition still exists because the condition REAR=MAX-1 still holds true. So, to solve this problem, we can use a circular queue.
- 3. When we allocate a large amount of space for the queue, it will result in sheer wastage of the memory. Thus, there lies a tradeoff between the frequency of overflows and the space allocated. So a better solution to deal with this problem is to have more than one queue or to have multiple queues.



(f)									
			С	D	I				
6.									
(a)									
F	А	В	С	D	Е				
(b)									
F	A	В	С	D	Е	G			
(C)									
F	A	В	С	D	Е	G	Н		
(d)									
		В	С	D	Е	G	Н		
(e)									
		В	С	D	Е	G	Н	I	
(f)									
	J	В	С	D	Е	G	Н	I	
(g)									
	J	В	С	D	Е	G			

Multiple-choice Questions

- 1. (b)
- 2. (a)
- 3. (b)
- 4. (a)
- 5. (b)

True or False

- 1.T
- 2.T
- 3.F
- 4.T
- 5.F
- 6.T
- 7.T
- 8.F

Fill in the blanks

- 1. last node
- 2. Deque
- 3. O(1)
- 4. Input restricted deque
- 5. circular array or circular doubly linked list
- 6. Queue
- 7. Queue