### **Activity 01**

Implement a circular-queue whose front and rear are connected together. Justify what is the problem in linear queue due to which we need a circular queue.

### **Activity 02**

Implement a list using array with following operations:

1. Traversal
2. Insertion at beginning
3. Insertion at end
4. Insertion at nth location
5. Deletion from beginning
6. Deletion from end
7. Deletion from nth location
8. Searching an element

### **Activity 03**

Create a structure for **book** that contains information about title, price, edition, and no of pages of the book. Use your program of stack to push and pop books on a stack.

### **Activity 02**

Let us model the flow of customers in a queue. Create a structure called **Person** that contains information about first name, last name, age, gender and address of a person. Use your program of queue to enqueue and dequeue Persons from a queue.