**Question 1:**

**Ans.**

A). Drawback of using this approach: We can’t increase and decrease the size of array when it’s needed and we can’t add delete elements of it because array has fixed size.

C). We want to use a resizable array where we can add, remove, increase the size of our array according to our needs. As coming messages will have different size and the array has fixed size so need to use some other storage. Let’s proceed with writing our classes first

B).Implementing Architectutre:

Create resizeableArray class

This will have a composite relation with a buffer class. We need a buffer as the size of array is fixed. This will act as a glue b/w the myQueue and resizeableArrayBuffer

We will give the initial value to its attributes

Create resizeableArrayBuffer class

Will have all the attributes of a buffer like size, count , capacity etc.

We will add buffer when once 90% of queue is occupied.

Create Queue class

This will have queue list of various messages coming from the server.

This is the main class where message is received and append.