

Queue Interface

```
import java.util.Deque;
import java.util.ArrayDeque;

class Tester {

    public static Deque<Object> mergeQueue(Deque<Integer> intQueue, Deque<Character>
charQueue) {
        Deque<Object> mergedQueue = new ArrayDeque<>();

        while (!intQueue.isEmpty() || !charQueue.isEmpty()) {
            if (!intQueue.isEmpty()) {
                mergedQueue.add(intQueue.poll());
            }
            if (!charQueue.isEmpty()) {
                mergedQueue.add(charQueue.poll());
            }
        }

        return mergedQueue;
    }

    public static void main(String[] args) {

        Deque<Integer> integerQueue = new ArrayDeque<>();
        integerQueue.add(3);
        integerQueue.add(6);
        integerQueue.add(9);
```

```
Deque<Character> characterQueue = new ArrayDeque<>();
characterQueue.add('a');
characterQueue.add('e');
characterQueue.add('i');
characterQueue.add('o');
characterQueue.add('u');
characterQueue.add('b');

Deque<Object> mergedQueue = mergeQueue(integerQueue, characterQueue);

System.out.println("The elements in the merged queue are:");
for(Object element: mergedQueue) {
    System.out.println(element);
}
}
```

```
C:\Users\Sarvesh\OneDrive\Desktop>java Tester3
The elements in the merged queue are:
3
a
6
e
9
i
o
u
b
```