King Fahd University of Petroleum & Minerals
College of Computer Science and Engineering
Information and Computer Science Department
ICS 202 – Data Structures

Lab 01: Review

Create a class call it `MyArrayList`, that works as a dynamic array

The class has the following attributes

- `array` (default length = 10)
- `last element index`

and the following methods

- `add(element)`:

  Adds the element after the last added element.
  If the array is full, it will use a bigger array.

- `get(index)`:

  Returns the element at the passed index

- `delete(index)`:

  Removes the element at the passed index

- `size()`:

  Returns the number of elements in MyArrayList

Notes:

- Use generics to make your list generic with any objects
- MyArrayList is indexing start from 0.
- Test delete followed by get throughly.

Then create a driver-class/main-method to test your ArrayList

Sample driver-class/main-method:

```
MyArrayList<Integer> list = new MyArrayList<Integer>();
for(int i = 0; i < 20; i++){
      list.add(new Integer(i));
}

System.out.println(list.size());
System.out.println(list.get(10));
list.delete(10);
System.out.println(list.size());
System.out.println(list.get(10));
```

Sample Output:

```
20
10
19
11
```