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package ArrayLists;
import java.util.*;
import java.util.Collection;
import java.util.ArrayList;
public class wrappers {

    static void reverse(ArrayList<Integer> l1)
    {
int i =0;
int j= l1.size()-1;

while(i<j){
    int temp = Integer.valueOf(l1.get(i));
    l1.set(i, l1.get(j));
    l1.set(j, temp);
i++;
j--;
}

    System.out.println(l1);

    }
    public static void main(String[] args) {
        Integer i = Integer.valueOf(3);
        System.out.println(i);
        Float f = Float.valueOf(3.0f);
        System.out.println(f);

        // why do we need these wrapper classes??
// bcz java is oops based
        ArrayList<Integer> l1= new ArrayList<>();
        // ArrayList<String> l2= new ArrayList<>();
        //ArrayList<Boolean> l3= new ArrayList<>();
        System.out.println(l1.size());
// add new element
        l1.add(1);
        l1.add(200);
        l1.add(398);
        l1.add(476);
// get an element at index i
        System.out.println(l1.get(2));
// print with for loop

        for(int k =0; k<l1.size(); k++){
            System.out.println(l1.get(k));
        }
// print arraylist directly

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        System.out.println(l1);

        //adding element at index i
        l1.add(1,33);
        System.out.println(l1);

// modify element at index i
        l1.set(1,209);
        System.out.println(l1);
        // remove at index i
        l1.remove(2);
        System.out.println(l1);
// remove an element e
        l1.remove(Integer.valueOf(209));
        System.out.println(l1);
        System.out.println( l1.remove(Integer.valueOf(209)));
// check if an element exists

        boolean ans = l1.contains(Integer.valueOf(476));
        System.out.println(ans);

        // if you dont specify class, you can put anything inside l
        ArrayList l2= new ArrayList<>();
        l2.add("app");
        l2.add(1);
        l2.add(true);
        System.out.println(l2);

// reverse a given arraylist
        l1.add(2);
        l1.add(3);
        l1.add(4);
        System.out.println(l1);
        reverse(l1);
        Collections.reverse(l1);
        System.out.println(l1);
        Collections.sort(l1);
        System.out.println(l1);
        Collections.sort(l1,Collections.reverseOrder());
        System.out.println(l1);
        ArrayList<String> l3= new ArrayList<>();
        l3.add("app");
        l3.add("toh");
        l3.add("ache");
        l3.add("insaan");
        Collections.sort(l3);
        System.out.println(l3);
        Collections.sort(l3, Collections.reverseOrder());
        System.out.println(l3);

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}  
}
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