

Problem description:

- a) Write the following method that returns the maximum value in an ArrayList of integers. The method returns null if the list is null or the list size is 0.

```
public static int max(ArrayList<Integer> list)
```

- b) Write the following method that returns the sum of all numbers in an ArrayList.

```
public static int sum(ArrayList<Integer> list)
```

- c) Write the following method that returns an ArrayList which removes the duplicated values in an ArrayList.

```
public static ArrayList nodup(ArrayList<Integer> list)
```

Write a test program that prompts the user to enter a sequence of integer numbers ending with 0, and invokes the max method to return the largest number in the input, the sum method to return the sum of all the numbers and the nodup method to return the list that has no duplicated values.