import java.util.HashSet;

import java.util.Iterator;

public class Hashing {

   public static void main(String args[]) {

       HashSet<Integer> set = new HashSet<>();

       //Add

       set.add(1);

       set.add(2);

       set.add(3);

       set.add(1);

       //Size

       System.out.println("size of set is : " + set.size());

       //Search

       if(set.contains(1)) {

           System.out.println("present");

       }

       if(!set.contains(6)) {

           System.out.println("absent");

       }

       //Delete

       set.remove(1);

       if(!set.contains(1)) {

           System.out.println("absent");

       }

       //Print all elements

       System.out.println(set);

       //Iteration - HashSet does not have an order

       set.add(0);

       Iterator it = set.iterator();

        while (it.hasNext()) {

           System.out.print(it.next() + ", ");

       }

       System.out.println();

       //isEmpty

       if(!set.isEmpty()) {

           System.out.println("set is not empty");

       }

   }

}