// Created by: Nicholas Carroll 10 December 2018

**package** lab7;

**import** java.util.Scanner;

**public** **class** EliminateDuplicates {

**public** **static** **void** main(String[] args) {

Scanner input = **new** Scanner(System.***in***);

**int**[] numbers = **new** **int**[10]; // Create an array of length 10

// Prompt the user to enter ten numbers

System.***out***.print("Enter ten numbers: ");

**for** (**int** i = 0; i < numbers.length; i++)

numbers[i] = input.nextInt();

// Get distinct numbers

**int**[] distinctNumbers = *eliminateDuplicates*(numbers);

// Display the result

System.***out***.print("The distinct numbers are:");

**for** (**int** e: distinctNumbers) {

**if** (e > 0)

System.***out***.print(" " + e);

}

System.***out***.println();

}

// eleminateDuplicates returns a new array with duplicate values eliminated

**public** **static** **int**[] eliminateDuplicates(**int**[] list) {

**int**[] distinctList = **new** **int**[list.length];

**int** i = 0; // index distinctList

**for** (**int** e: list) {

**if** (*linearSearch*(distinctList, e) == -1) {

distinctList[i] = e;

i++;

}

}

**return** distinctList;

}

**public** **static** **int** linearSearch(**int**[] array, **int** key) {

**for** (**int** i = 0; i < array.length; i++) {

**if** (key == array[i])

**return** i;

}

**return** -1;

}

}