

Welcome

ArrayEvenOdd.java 8 X

ArrayEvenOdd.java &gt; Array\_List &gt; arraylist()

```

1  import java.util.*;
2  import java.util.Scanner;
3
4
5  class Smallest_distance
6  {
7      static void smallest_distance()
8      {
9          int[] arr = new int[10];
10         Scanner sc = new Scanner(System.in); System.out.println("Enter 10 numbers: "); for (int i = 0; i < 10; i++) {
11             arr[i] = sc.nextInt();
12         }
13         int min = Integer.MAX_VALUE; int minI=0,minJ=0;
14         for (int i = 0; i < 9; i++) { int diff = arr[i+1] - arr[i]; if(diff < min){
15             min = diff; minI = i; minJ = i+1;
16         }
17     }
18     System.out.println("The smallest distance is between " + arr[minI] + " and " + arr[minJ] + " and the distance is " + min);
19     sc.close();
20 }
21 }
22
23
24 class Array_list{
25     static void arraylist()
26     {
27         int[] array = new int[10];
28         Scanner sc = new Scanner(System.in); System.out.println("Enter 10 numbers: "); for(int i = 0; i < 10; i++)
29         {
30             int n = sc.nextInt(); array[i] = n;
31         }
32
33         ArrayList<Integer> list = new ArrayList<Integer>(); for(int i = 0; i < 10; i++){
34             list.add(array[i]);
35         }
36         System.out.println(list); sc.close();
37     }
38 }
39
40
41
42 public class ArrayEvenOdd
43 {
44     Run | Debug
45     public static void main(String[] args) {
46
47         System.out.println("1. Smallest distance between two numbers in an array"); System.out.println("2. Array to ArrayList");
48         System.out.println("1. Even and Odd numbers"); System.out.println("Enter your choice: "); Scanner sc1 = new Scanner(System
49         int choice = sc1.nextInt(); switch(choice)
50         {
51             case 1:
52                 Smallest_distance.smallest_distance(); break;
53             case 2:
54                 Array_list.arraylist(); break;
55             case 3:
56                 // Create two arrays odd and even int[] odd = new int[10];
57                 int[] even = new int[10];
58
59                 Scanner sc = new Scanner(System.in);
60                 System.out.print("Enter numbers to classify, enter 'end' to stop: "); while(true)
61                 {
62                     String input = sc.nextLine(); if(input.equals("end"))
63                     {
64                         break;
65                     }
66                     else
67                     {
68                         int num = Integer.parseInt(input); if(num%2 == 0)
69                         {
70                             for(int i=0; i<even.length; i++)
71                             {
72                                 if(even[i] == 0)
73                                 {
74                                     even[i] = num; break;
75                                 }
76                             }
77                         }
78                     }
79                     else
80                     {
81                         for(int i=0; i<odd.length; i++)
82                         {
83                             if(odd[i] == 0)

```

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```
56 int[] even = new int[10];
57
58
59 Scanner sc = new Scanner(System.in);
60 System.out.print("Enter numbers to classify, enter 'end' to stop: "); while(true)
61 {
62     String input = sc.nextLine(); if(input.equals("end"))
63     {
64         break;
65     }
66     else
67     {
68         int num = Integer.parseInt(input); if(num%2 == 0)
69
70         {
71             for(int i=0; i<even.length; i++)
72             {
73                 if(even[i] == 0)
74                 {
75                     even[i] = num; break;
76                 }
77             }
78         }
79         else
80         {
81             for(int i=0; i<odd.length; i++)
82             {
83                 if(odd[i] == 0)
84                 {
85                     odd[i] = num; break;
86                 }
87             }
88         }
89     }
90 }
91 sc.close();
92 // Print the arrays: System.out.println("Even numbers: "); for(int i=0; i<even.length; i++)
93 {
94     if(even[i] != 0)
95     {
96         System.out.print(even[i]+" ");
97     }
98 }
99
100 System.out.println(); System.out.println("Odd numbers: "); for(int i=0; i<odd.length; i++)
101 {
102     if(odd[i] != 0)
103     {
104         System.out.print(odd[i]+" ");
105     }
106 }
107
108
109 default:
110 System.out.println("Invalid choice");
111 }
112 sc1.close();
113 }
114 }
115 }
```