Java Assignment 2

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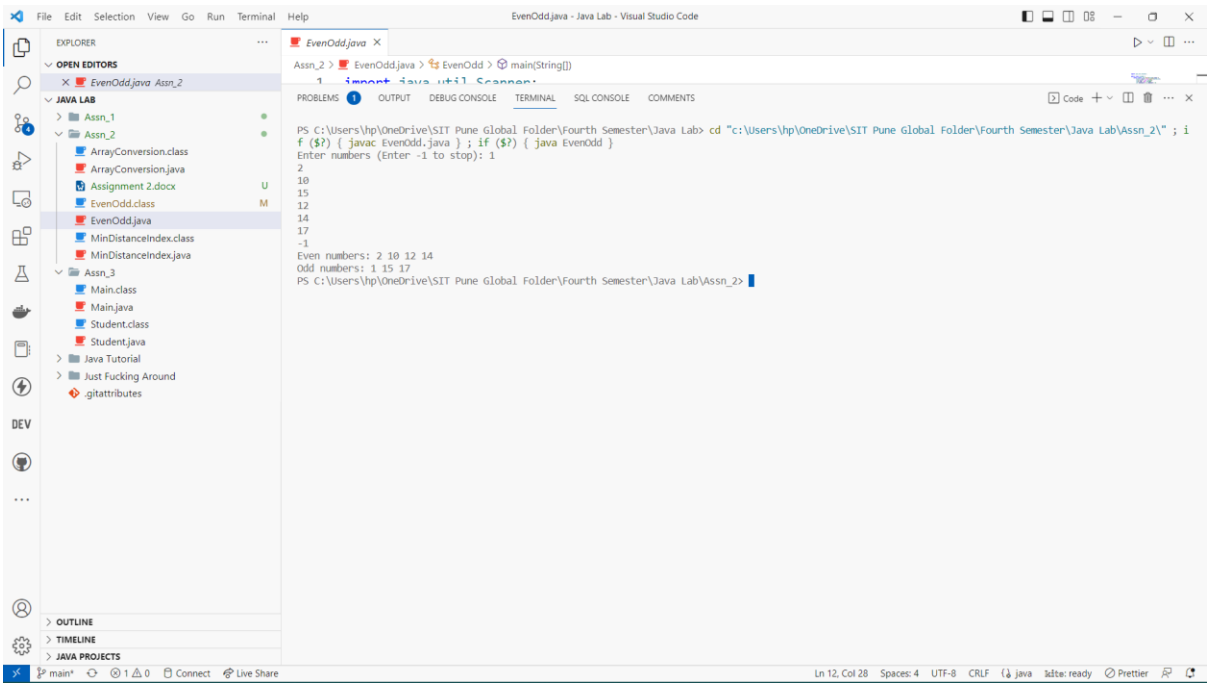
Even Odd

```
import java.util.Scanner;

public class EvenOdd {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        int[] even = new int[100];
        int[] odd = new int[100];
        int evenCount = 0, oddCount = 0;

        System.out.print("Enter numbers (Enter -1 to stop):
");
        int num = input.nextInt();
        while (num != -1) {
            if (checkNum(num) == 1) {
                even[evenCount] = num;
                evenCount++;
            } else {
                odd[oddCount] = num;
                oddCount++;
            }
            num = input.nextInt();
        }

        System.out.print("Even numbers: ");
        display(even, evenCount);

        System.out.print("Odd numbers: ");
        display(odd, oddCount);
        input.close();
    }

    static int checkNum(int num) {
        // 1 for even, 0 for odd.
```

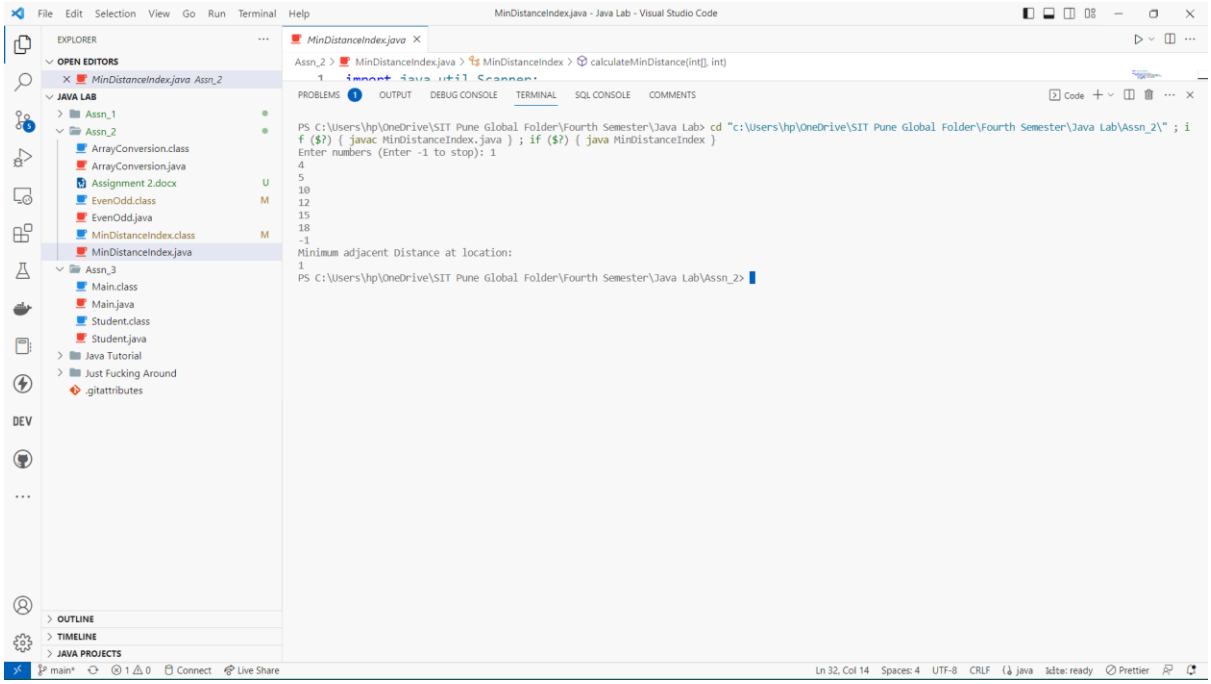
```
            if (num % 2 == 0) {
                return 1;
            } else {
                return 0;
            }
        }

        static void display(int[] arr, int len) {
            for (int i = 0; i < len; i++) {
                System.out.print(arr[i] + " ");
            }
            System.out.println();
        }
}
```



Min Distance In Array

```
import java.util.Scanner;

public class MinDistanceIndex {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        int[] numbers = new int[10];
        int count = 0;
```

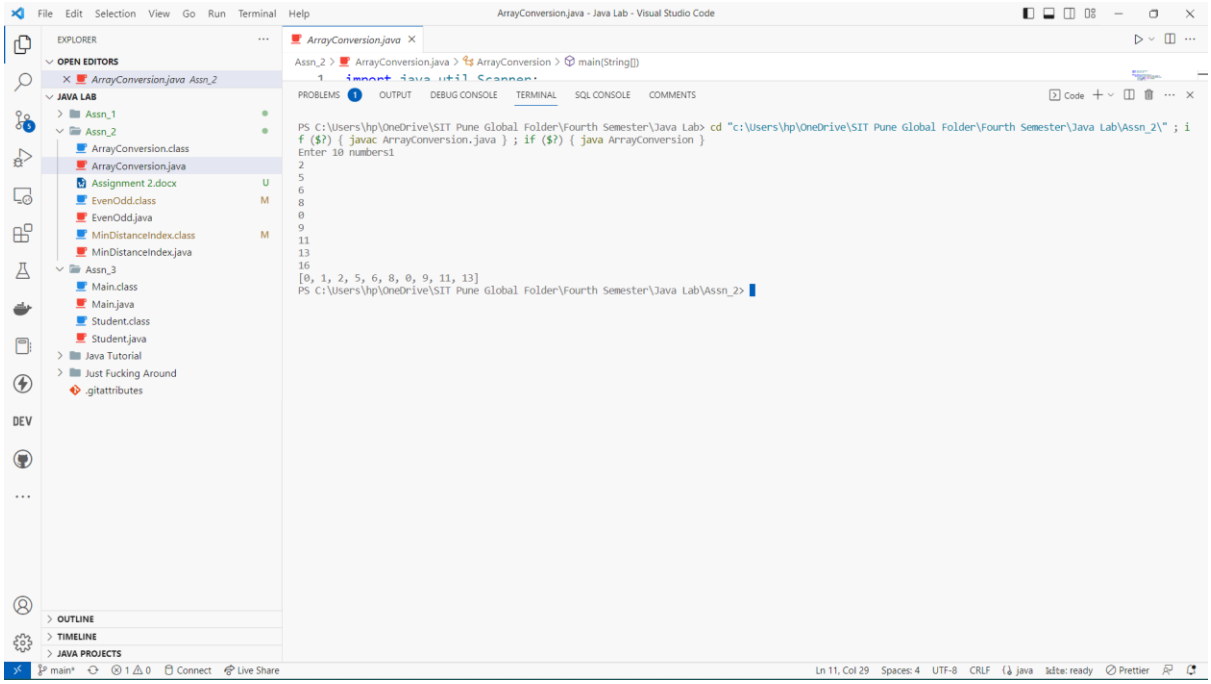
```
        System.out.print("Enter numbers (Enter -1 to stop):
");
        int num = input.nextInt();
        while (num != -1) {
            numbers[count] = num;
            count++;
            num = input.nextInt();
        }

        System.out.println("Minimum adjacent Distance at
location: ");
        System.out.println(calculateMinDistance(numbers,
count));
        input.close();
    }

    static int calculateMinDistance(int[] arr, int len) {
        int[] distances = new int[9];
        int minIdx = 0;
        for (int i = 0; i < len - 1; i++) {
            distances[i] = arr[i + 1] - arr[i];
        }

        for (int j = 0; j < len - 2; j++) {
            if (distances[j] < distances[minIdx]) {
                minIdx = j;
            }
        }
        return minIdx;
    }
}
```



Array Conversion to List

```java
import java.util.Scanner;
import java.util.*;

public class ArrayConversion {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        int[] numbers = new int[10];
        int count = 1;
        System.out.print("Enter 10 numbers");
        int num = input.nextInt();
        while (count < 10) {
            numbers[count] = num;
            count++;
            num = input.nextInt();
        }
        convertToArrayList(numbers);
        input.close();
    }

    static void convertToArrayList(int[] arr) {
        ArrayList<Integer> list = new ArrayList<Integer>();
        for(int l = 0; l < 10; l++){
```

```
                list.add(arr[l]);
            }
            System.out.println(list);
        }
}
```



Github: https://github.com/om-varshney/Java-Lab/tree/main/Assn_2