Jade Pearl

COSC 117 Lab 8 Report

Example 1: Swap the maximum

1. Source Code:

SwapMax.java

```java
import java.util.Scanner;

public class SwapMax {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner keyboard = new Scanner (System.in);
        int[] array = new int[5];
        for (int i = 0; i < array.length; i++) {
            System.out.print("Enter an integer: ");
            array[i] = keyboard.nextInt();
        }

        for (int i = 0; i < array.length - 1; i++) {
            if (array[i] > array[i + 1]) {
                int temp = array[i];
                array[i] = array[i + 1];
                array[i + 1] = temp;
            }
        }
        for (int i = 0; i < array.length; i++) {
            System.out.print(array[i] + " ");
        }
    }
}
```

2. Output:

Problems @ Javadoc Declaration Console

<terminated> SwapMax [Java Application] C:\Users\jpmd1\

```
Enter an integer: 2
Enter an integer: 1
Enter an integer: 3
Enter an integer: 5
Enter an integer: 6
1 2 3 5 6
```

Example 2: Minimum odd integer

1. Source Code:

MinOdd.java

```java
import java.util.Scanner;

public class MinOdd {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner keyboard = new Scanner (System.in);
        int[] arr = new int[8];
        for (int i = 0; i < arr.length; i++) {
            System.out.print("Enter an integer: ");
            arr[i] = keyboard.nextInt();
        }
        System.out.print("The minimum odd number is: " + getOddMin(arr));
    }

    public static int getOddMin(int[] array) {
        int min = array[0];
        for (int i = 0; i < array.length; i++) {
            if (array[i] % 2 != 0) {
                if (array[i] < min) {
                    min = array[i];
                }
            }
        }
        return min;
    }
}
```

2. Output:

Problems @ Javadoc Declaration Console

<terminated> MinOdd [Java Application] C:\Users\jpmd

```
Enter an integer: 2
Enter an integer: 3
Enter an integer: 1
Enter an integer: 5
Enter an integer: 4
Enter an integer: 6
Enter an integer: 7
Enter an integer: 8
The minimum odd number is: 1
```

Example 3: 2D array

1. Source code:

SalesArray.java

```java
import java.util.Scanner;

public class SalesArray {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner keyboard = new Scanner (System.in);
        int[][] sales = new int[2][3];
        for (int row = 0; row < 2; row++) {
            for (int col = 0; col < 3; col++) {
                System.out.print("Enter a sales number: ");
                sales[row][col] = keyboard.nextInt();
            }
        }
        int max = sales[0][0];
        int min = sales[0][0];
        for (int row = 0; row < 2; row++) {
            for (int col = 0; col < 3; col++) {
                if (sales[row][col] < min) {
                    min = sales[row][col];
                }
                if (sales[row][col] > max) {
                    max = sales[row][col];
                }
            }
        }
        System.out.println("The maximum sales number is: " + max);
        System.out.println("The minimum sales number is: " + min);
    }
}
```

2. Output:

Problems Javadoc Declaration Console

<terminated> SalesArray [Java Application] C:\Users\jpm

```
Enter a sales number: 40
Enter a sales number: 100
Enter a sales number: 50
Enter a sales number: 30
Enter a sales number: 60
Enter a sales number: 70
The maximum sales number is: 100
The minimum sales number is: 30
```