**3. Write a program that allows you to create an integer array of 18 elements with the following values:**

**int A[] = {3, 2, 4, 5, 6, 4, 5, 7, 3, 2, 3, 4, 7, 1, 2, 0, 0, 0}. Perform the following computations,**

**• Compute the sum of elements from index 0 to 14 and stores it at element 15.**

**• Compute the average of all numbers and stores it at element 16.**

**• Identifies the smallest value from the array and stores it at element 17.**

**package** day3assignment;

**public** **class** Array {

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

**int** A[]= {3, 2, 4, 5, 6, 4, 5, 7, 3, 2, 3, 4, 7, 1, 2, 0, 0, 0};

**int** sum=0;

**for**(**int** i=0;i<15;i++) {

sum+=A[i];

}

A[15]=sum;

**int** totalsum=0;

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

totalsum+=A[i];

}

**int** average=totalsum/A.length;

A[16]=average;

**int** smallestValue = A[0];

**for** (**int** i = 1; i < A.length; i++) {

**if** (A[i] < smallestValue) {

smallestValue = A[i];

}

}

A[17] = smallestValue;

System.***out***.println("the sum upto a[14]:"+A[15]);

System.***out***.println("the average of array:"+A[16]);

System.***out***.println("The modified array is:");

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

System.***out***.print(A[i] + " ");

}

}

}

**Output:**

the sum upto a[14]:58

the average of array:6

The modified array is:

3 2 4 5 6 4 5 7 3 2 3 4 7 1 2 58 6 0

**package** day3assignment;

**import** java.util.Arrays;

**import** java.util.Collections;

**import** java.util.Scanner;

**public** **class** Descarray {

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

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

System.***out***.println("enter the length of array:");

**int** n =sc.nextInt();

Integer[] array = **new** Integer[n];

System.***out***.println("enter elements of array:");

**for**(**int** i=0;i<n;i++) {

array[i]=sc.nextInt();

}

Arrays.*sort*(array, Collections.*reverseOrder*());

System.***out***.println("Sorted array in descending order: " + Arrays.*toString*(array));

}

}

enter the length of array:

7

enter elements of array:

2

6

23

98

24

35

78

Sorted array in descending order: [98, 78, 35, 24, 23, 6, 2]

**package** day3assignment;

**import** java.util.Scanner;

**public** **class** Removeduplicatesinarray {

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

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

System.***out***.println("enter array length:");

**int** n = sc.nextInt();

System.***out***.println("enter array values:");

**int** arr[] = **new** **int**[n];

**for**(**int** i=0;i<n;i++) {

arr[i]=sc.nextInt();

}

**int** j=1;

**for**(**int** i=1;i<n;i++) {

**if**(arr[i]!=arr[i-1]) {

arr[j]=arr[i];

j++;

}

}

System.***out***.println("The modified array is:");

**for** (**int** i = 0; i <j; i++) {

System.***out***.print(arr[i] + " ");

}

}

}

enter array length:

9

enter array values:

1

2

2

3

3

4

4

5

5

The modified array is:

1 2 3 4 5