***Name - Akriti Choudhary***

***Roll number- 2005776***

***Section- cse25***

***Date - 1/2/2022***

***WT LAB3***

**1.WAP to find the largest among 3 numbers user entered nos. At the command prompt using Java.**

public class maxNum

{

public static void main(String[] args)

{

int a = Integer.parseInt(args[0]);

int b = Integer.parseInt(args[1]);

int c = Integer.parseInt(args[2]);

int max = a;

if(max < b)

{

max = b;

}

if(max < c)

{

max = c;

}

System.out.println("Maximum num = " +max);

}

}

**2. WAP to accept 10 numbers from command line and check how many of them are even and how many odd.**

public class evenOdd {

public static void main(String[] args) {

int[] arr = new int[10];

int a;

for (int i = 0; i < 10; ++i) {

a = Integer.parseInt(args[i]);

arr[i] = a;

}

for (int i = 0; i < 10; ++i) {

if (arr[i] % 2 == 0) {

System.out.println("Even");

} else {

System.out.println("odd");

}

}

}

}

**3. WAP to enter ‘n’ numbers from command line and find minimum, maximum, average, and standard deviation of these list of numbers.**

import java.lang.Math;

public class maxMin {

public static void main(String[] args) {

int[] arr = new int[5];

int a;

for (int i = 0; i < 5; ++i) {

a = Integer.parseInt(args[i]);

arr[i] = a;

}

int max = 0;

int min = 0;

int sum = 0;

int standardDeviation = 0;

for (int i = 0; i < 10; ++i) {

if (arr[i] > max) {

max = arr[i];

}

if (arr[i] < min) {

min = arr[i];

}

sum += arr[i];

}

int mean = sum / 5;

for (int i = 0; i < 5; i++) {

standardDeviation = standardDeviation + (int) Math.pow((arr[i] - mean), 2);

}

System.out.println("Max Num = " + max);

System.out.println("Min Num = " + min);

System.out.println("Average = " + sum / 5);

System.out.println("standardDeviation = " + standardDeviation);

}

}

**4. WAP to sort the user entered list of numbers of any size using bubble sort.**

class bubblesort

{

void bubbleSort(int arr[])

{

int n = arr.length;

for (int i = 0; i < n-1; i++)

for (int j = 0; j < n-i-1; j++)

if (arr[j] > arr[j+1])

{

int temp = arr[j];

arr[j] = arr[j+1];

arr[j+1] = temp;

}

}

void printArray(int arr[])

{

int n = arr.length;

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

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

System.out.println();

}

public static void main(String args[])

{

int[] arr = new int[5];

int a;

for (int i = 0; i < 5; ++i) {

a = Integer.parseInt(args[i]);

arr[i] = a;

}

bubblesort ob = new bubblesort();

ob.bubbleSort(arr);

System.out.println("Sorted array");

ob.printArray(arr);

}

}

**5. WAP to design a calculator which receive <first number> <operator> <second number> from command line and display result.**

public class calculator {

public static void main(String[] args) {

int a = Integer.parseInt(args[0]);

String b = args[1];

int c = Integer.parseInt(args[2]);

if (b.equals("+")) {

System.out.println("a + c = " + (a + c));

}

if (b.equals("-")) {

System.out.println("a - c = " + (a - c));

}

if (b.equals("\*")) {

System.out.println("a \* c = " + (a \* c));

}

if (b.equals("/")) {

System.out.println("a / c = " + (a / c));

}

}

}