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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));
        }

    }

}
```