

CSA0985 -- PROGRAMMING IN JAVA

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1)Write a java program to calculate average value of array of elements?

```
class averagearray
{
    public static void main(String[] args)
    {
        int[] numarray={10,20,46,37,68,89};
        int sum=0;
        for(int num: numarray)
        {
            sum+=num;
        }
        int average=sum/numarray.length;
        System.out.println("the average value is: "+average);
    }
}
```

2) Write a java program to find minimum and maximum value of an array?

```
class minmaxarray
{
    public static void main(String[] args)
```

```

{
    int [] arr={12,45,34,78,21,89,54,10,9};
    int min=arr[0];
    int max=arr[0];
    for(int i=1;i<arr.length;i++)
    {
        if(arr[i]<min)
        {
            min=arr[i];
        }
        if(arr[i]>max)
        {
            max=arr[i];
        }
    }
    System.out.println("minimum value: "+min);
    System.out.println("maximum value: "+max);
}
}

```

3)Write a java program to find second largest number in array?

Class secondlargestarray

```

{
    public static void main(String args[])
    {
        int temp, size;

```

```

int array[] = {20, 50, 25, 83, 99, 77};
size = array.length;
for(int i=0;i<size;i++ )
{
    for(int j=i+1;j<size;j++)
    {
        if(array[i]>array[j])
        {
            temp=array[i];
            array[i]=array[j];
            array[j]=temp;
        }
    }
}
System.out.println("Second largest number is: "+array[size-2]);
}
}

```

4)Write a java program to add two matrix of same size?

```

class twomatrix
{
    public static void main(String[] args)
    {
        int rows = 3, columns = 3;
        int[][] firstMatrix = { {2, 3, 4}, {5, 2, 3},{3,7,8} };
    }
}

```

```

int[][] secondMatrix = { {-4, 5, 3}, {5, 6, 3},{2,9,6} };
int[][] sum = new int[rows][columns];
for(int i = 0; i < rows; i++)
{
    for (int j = 0; j < columns; j++)
    {
        sum[i][j] = firstMatrix[i][j] + secondMatrix[i][j];
    }
}
System.out.println("Sum of two matrices is: ");
for(int[] row : sum)
{
    for (int column : row)
    {
        System.out.print(column + "  ");
    }
    System.out.println();
}
}
}

```

5)Write a program to display cube of given number up to integer?

Class cubeinteger

```

{
    public static void main(String[] args)

```

```

{
int rows = 3, columns = 3;
int[][] firstMatrix = { {2, 3, 4}, {5, 2, 3},{3,7,8} };
int[][] secondMatrix = { {-4, 5, 3}, {5, 6, 3},{2,9,6} };
int[][] sum = new int[rows][columns];
for(int i = 0; i < rows; i++)
{
for (int j = 0; j < columns; j++)
{
sum[i][j] = firstMatrix[i][j] + secondMatrix[i][j];
}
}
System.out.println("Sum of two matrices is: ");
for(int[] row : sum)
{
for (int column : row)
{
System.out.print(column + " ");
}
System.out.println();
}
}
}

```

6)Take a year from user and find it is leap year or not?

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

```

class leapyearornot
{
    public static void main(String[] args)
    {
        int a;
        Scanner input=new Scanner(System.in);
        System.out.println("Enter the a value:");
        a=input.nextInt();
        {
            if(a%4==0)
            {
                System.out.println("a is Leap year");
            }
            else
            {
                System.out.println("a is Non-leap year");
            }
        }
    }
}

```

7)Write a java program to display n terms of natural numbers and it's sum?

```

import java.util.Scanner;
class naturalnumbers
{
    public static void main(String[] args)

```

```

{
    int n,sum=0;
    Scanner input=new Scanner(System.in);
    System.out.println("Enter the value of n:");
    n=input.nextInt();
    for(int i=1;i<=n;i++)
    {
        System.out.println(i);
    }
    sum=n*(n+1)/2;
    System.out.println("sum of "+ n +" numbers= "+sum);
}
}

```

8)Write a java program to display multiplication table of given integer?

```

import java.util.Scanner;

class multiptable
{
    public static void main(String args[])
    {
        System.out.println("Enter an integer variable :: ");
        Scanner sc = new Scanner(System.in);
        int num = sc.nextInt();
        for(int i=1; i<= 10; i++)
        {

```

```
System.out.println(""+num+" X "+i+" = "+(num*i));  
}  
}  
}
```