**Program1:to create 1D array and display elements using by for loops**

**public** **class** program4 {

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

**int** arr[]=**new** **int**[5];

arr[0]=10;

arr[1]=20;

arr[2]=30;

arr[3]=40;

arr[4]=50;

**int** n=arr.length;

System.*out*.println("The array Length is\t"+n);

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

{

System.*out*.println(arr[i]);

}

}

}

Program2:program to calculate total and percentage using 1DArray

**package** sample\_programs;

**public** **class** program2 {

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

**int** tot=0;

**float** percent;

**int** arr[]=**new** **int**[5];//array declaration

//store elements into the array

arr[0]=10;

arr[1]=20;

arr[2]=30;

arr[3]=40;

arr[4]=50;

//get the length of the array

**int** n=arr.length;

System.*out*.println("The array Length is="+n);

//display elements from array

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

{

System.*out*.println(arr[i]);

}

//find total marks

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

{

tot=tot+arr[i];

}

//display total marks

System.*out*.println("totla marks="+tot);

//find percentage

percent=(**float**)tot/n;

System.*out*.println("percentage"+percent);

}

}

Program3:string 1D array

**public** **class** program6 {

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

String name[]=**new** String[5];

name[0]="ramu";

name[1]="kumar";

name[2]="gopal";

name[3]="mahesh";

name[4]="ramesh";

**int** n=name.length;

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

{

System.*out*.println(name[i]);

}

}

}

Program4:

**public** **class** program4 {

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

String month[]=**new** String[12];

month[0]="jan";

month[1]="feb";

month[2]="mar";

month[3]="april";

month[4]="may";

month[5]="june";

month[6]="july";

month[7]="aug";

month[8]="sep";

month[9]="oct";

month[9]="nov";

month[9]="dec";

System.*out*.println(month[0]);

System.*out*.println(month[1]);

System.*out*.println(month[2]);

}

}

Program5:write a program to sort an array

**public** **class** program5 {

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

**int** i;

**int** a[]=**new** **int**[6];

a[0]=55;

a[1]=75;

a[2]=40;

a[3]=12;

a[4]=13;

a[5]=22;

**int** n=a.length;

System.*out*.println("length of the array="+n);

System.*out*.println("given list");

System.*out*.println("--------------");

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

{

System.*out*.println(a[i]);

}

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

{

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

{

**if**(a[i]>a[j])

{

**int** t=a[i];

a[i]=a[j];

a[j]=t;

}

}

}

System.*out*.println("sorted list");

System.*out*.println("------------");

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

{

System.*out*.println(a[i]);

}

}

}

Program6:simple 2D Array

1. **class** Testarray3{
2. **public** **static** **void** main(String args[]){

//declaring and initializing 2D array

**int** arr[][]={{1,2,3},{2,4,5},{4,4,5}};

//printing 2D array

**for**(**int** i=0;i<3;i++){

**for**(**int** j=0;j<3;j++){

   System.out.print(arr[i][j]+" ");

 }

 System.out.println();

}

}}

Program7: Addition of 2 matrices

1. **class** Testarray5{
2. **public** **static** **void** main(String args[]){
3. //creating two matrices
4. **int** a[][]={{1,3,4},{3,4,5}};
5. **int** b[][]={{1,3,4},{3,4,5}};
7. //creating another matrix to store the sum of two matrices
8. **int** c[][]=**new** **int**[2][3];
10. //adding and printing addition of 2 matrices
11. **for**(**int** i=0;i<2;i++){
12. **for**(**int** j=0;j<3;j++){
13. c[i][j]=a[i][j]+b[i][j];
14. System.out.print(c[i][j]+" ");
15. }
16. System.out.println();//new line
17. }
19. }}

Program8: [declare an array of different data types](https://stackoverflow.com/questions/16363547/how-to-declare-an-array-of-different-data-types)

import java.util.ArrayList;

import java.util.List;

public class ArrayLst {

    public static void main(String... args)

    {

        ArrayList al = new ArrayList();

        al.add("Java4s");

        al.add(12);

        al.add(12.54f);

        for(int i=0;i<al.size();i++)

        {

            Object o = al.get(i);

            if(o instanceof String || o instanceof Float || o instanceof Integer)

            System.out.println("Value is "+o.toString());

        }

    }

}