**package** new\_p;

//import java.util.Arrays;

**import** java.util.Scanner;

**public** **class** Day3\_Arrays {

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

// **TODO** Auto-generated method stub

// sum of all elements in an array

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

**int** sum=0;

**for** (**int** num :a) {

sum+=num;

}

System.***out***.println(sum);

//Count even and odd numbers from an array

**int**[] array={1,2,3,4,5,6};

**int** evenC=0, oddC=0;

**for** (**int** num:array) {

**if** (num%2==0) {

evenC++;

} **else** {

oddC++;

}

}

System.***out***.println(evenC);

System.***out***.println(oddC);

//Find maximum and minimum elements from an array

/\*int[] array1= {10,20,30,40,50};

int max = array1[0], min=array1[0];

for (int num :array1) {

if (num>max) {

max=num;

} else if (num<min) {

min=num;

}

}

System.out.println(max);

System.out.println(min);\*/

//Find second highest element from an array

**int**[] array2= {10,20,30,40,50};

**int** m= Integer.***MIN\_VALUE***, n= Integer.***MIN\_VALUE***;

**for** (**int** num:array2) {

**if** (num>m) {

n=m;

m=num;

} **else** **if** (num >n && num!=m) {

n= num;

}

}

System.***out***.println("Second highest element"+n);

//Search for a number entered by the user in an array

**int**[] array3={10,20,30,40,50};

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

System.***out***.print("Enter a number to search:");

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

**boolean** found =**false**;

**for** (**int** num2:array3) {

**if** (num2==t) {

found=**true**;

**break**;

}

}

**if** (found) {

System.***out***.println(t+"is found");

} **else** {

System.***out***.println(t+"is not found");

}

sc.close();

//Print an array in reverse order

**int**[] array4 = {1,2,3,4,5};

**for** (**int** num :array4) {

System.***out***.print(num+" ");

}

System.***out***.println("Array in reverse order:");

**for** (**int** i = array4.length-1;i>=0;i--) {

System.***out***.print(array4[i]+" ");

}

//Sort an array in ascending order

/\*int[] array5 = {5, 2, 8, 1, 9};

Arrays.sort(array5);

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

for (int num : array5) {

System.out.print(num + " ");

}\*/

//Print only prime numbers from array

**int**[] array6 = {2, 3, 4, 5, 6, 7, 8, 9};

System.***out***.println("Prime numbers:");

**for** (**int** num1 :array6) {

**if** (*isPrime*(num1)) {

System.***out***.print(num1+" ");

}

}

}

**public** **static** **boolean** isPrime(**int** num) {

**if** (num<=1) {

**return** **false**;

}

**for** (**int** i=2;i<= Math.*sqrt*(num);i++) {

**if** (num%i==0) {

**return** **false**;

}

}

**return** **true**;

//remove duplicates from an array

/\*int[] array9={1,2,2,4,4,5};

Arrays.sort(array9);

System.out.println("Array without duplicates:");

int prev = array9[0];

System.out.print(prev + " ");

for (int i = 1; i < array9.length; i++) {

if (array9[i] != prev) {

System.out.print(array9[i] + " ");

prev = array9[i];

}

}\*/

//copy all elements from one array to another

/\*int[] s1={1,2,3,4,5};

int[] d1= new int[s1.length];

for (int i= 0;i<s1.length;i++) {

d1[i]=s1[i];

}

System.out.println("Source array:");

for (int num5:s1) {

System.out.print(num5+" ");

}

System.out.println("\nDest array:");

for (int num5:d1) {

System.out.print(num5+" ");

}\*/

}

}

**package** day9\_assign;

**import** java.util.ArrayList;

**import** java.util.Collections;

**import** java.util.List;

**class** Employee **implements** Comparable<Employee> {

**private** String name;

**private** **int** id;

**private** **double** salary;

**public** Employee(String name, **int** id, **double** salary) {

**this**.name=name;

**this**.id=id;

**this**.salary=salary;

}

**public** String getName() {

**return** name;

}

**public** **int** getId() {

**return** id;

}

**public** **double** getSalary() {

**return** salary;

}

**public** **int** compareTo(Employee other) {

**return** **this**.name.compareTo(other.name);

}

**public** String toString() {

**return** "Name"+name+"ID"+id+"Salary"+salary;

}

}

**public** **class** Q3 {

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

// **TODO** Auto-generated method stub

List<Employee> employees = **new** ArrayList<>();

employees.add(**new** Employee("A", 101, 50000.0));

employees.add(**new** Employee("B", 102, 60000.0));

employees.add(**new** Employee("C", 103, 55000.0));

employees.add(**new** Employee("D", 104, 70000.0));

employees.add(**new** Employee("E", 105, 45000.0));

System.***out***.println("Before sorting:");

**for** (Employee e: employees) {

System.***out***.println(e);

}

Collections.*sort*(employees);

System.***out***.println("\nAfter sorting:");

**for** (Employee e: employees) {

System.***out***.println(e);

}

}

}