**addition**

import java.util.Scanner;

class Test{

public static void main(String[] args) {

Scanner s=new Scanner(System.in);

System.out.println("enter a");

int a=s.nextInt();

System.out.println("enter b");

int b=s.nextInt();

System.out.println(a);

System.out.println(b);

System.out.println(a+b);

}

}

**Swaping of numbers**

class HelloWorld {

public static void main(String[] args) {

int a=5,b=7;

a=a^b;

b=a^b;

a=a^b;

System.out.println(a);

System.out.println(b);

}

}

**NEGATIVE NUMBER**

class HelloWorld{

public static void main(String[] args) {

int a=5;

System.out.println((~a+1));

}

}

**EVEN AND ODD**

import java.util.Scanner;

class Test{

public static void main(String[] args) {

Scanner s=new Scanner(System.in);

System.out.println("enter a");

int a=s.nextInt();

if ((a%2)==0) {

System.out.println("even");

}

else {

System.out.println("odd");

}

}

}

**Leap year**

import java.util.Scanner;

class HelloWorld{

public static void main(String[] args) {

Scanner s=new Scanner(System.in);

System.out.println("enter a");

int a=s.nextInt();

if ((a%4)==0) {

System.out.println("leap year");

}

else {

System.out.println(" not a leap year");

}

}

}

**Find which number is greater than among three numbers**

import java.util.Scanner;

class HelloWorld{

public static void main(String[] args) {

Scanner s=new Scanner(System.in);

System.out.println("enter a");

int a=s.nextInt();

System.out.println("enter b");

int b=s.nextInt();

System.out.println("enter c");

int c=s.nextInt();

if (a>b&&a>c) {

System.out.println(a);

}

else if (b>a&&b>c){

System.out.println(b);

}

else {

System.out.println(c);

}

}

}

**Perfect square**

import java.util.Scanner;

class HelloWorld{

public static void main(String[] args) {

Scanner s=new Scanner(System.in);

System.out.println("enter a");

int a=s.nextInt();

double x=Math.sqrt(a);

if (x\*x==a) {

System.out.print("perfect square");

}

else {

}

}

}

**One line code for max number**

#include <stdio.h>

int main(){

int a=10,b=3,c=21,d=18,max;

max=(a>b?a:b)>(c>d?c:d)?(a>b?a:b):(c>d?c:d);

printf("%d",max);

}

**Reverse of a number**

import java.util.Scanner;

class HelloWorld{

public static void main(String[] args) {

Scanner s=new Scanner(System.in);

System.out.println("enter n");

int n=s.nextInt();

int rev=0,digit;

while(n!=0){

digit=n%10;

rev=rev\*10+digit;

n=n/10;

}

System.out.println(rev);

}

}

**FINDING n NUMBER OF XOR (burte force)**

import java.util.Scanner;

class HelloWorld {

public static void main(String[] args) {

Scanner s=new Scanner(System.in);

System.out.print("enter n:");

int n=s.nextInt();

int x=0;

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

x=x^i;

}

System.out.println(x);

}

}

**optimal**

import java.util.Scanner;

class HelloWorld {

public static void main(String[] args) {

Scanner s=new Scanner(System.in);

System.out.print("enter n:");

int n=s.nextInt();

if(n%==1) System.out.println(1);

if(n%==2) System.out.println(n+1);

if(n%==3) System.out.println(0);

if(n%==0) System.out.println(n);

}

}

**Finding the xor between the given two numbers(burte force)**

import java.util.Scanner;

class HelloWorld {

public static void main(String[] args) {

Scanner s=new Scanner(System.in);

System.out.println("enter value l");

System.out.println("enter value r");

int l=s.nextInt();

int r=s.nextInt();

int x=0;

for (int i=l;i<=r;i++) {

x=x^i;

}

System.out.println(x);

}

}

**optimal**

import java.util.Scanner;

class HelloWorld {

public static void main(String[] args) {

Scanner s=new Scanner(System.in);

System.out.println("enter value l");

int l=s.nextInt();

System.out.println("enter value r");

int r=s.nextInt();

int x=0;

for (int i=1;i<=r;i++) {

x=(x^i)^(x^(l-1));

}

System.out.println(x);

}

}

**Array declaration**

import java.util.Scanner;

class HelloWorld {

public static void main(String[] args) {

Scanner scanner=new Scanner(System.in);

int size=scanner.nextInt();

int[] arr=new int[size];

System.out.println("enter elements of array:");

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

{

arr[i]=scanner.nextInt();

}

System.out.println(" elements of array:");

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

{

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

}

}

}

**Finding max number**

import java.util.Scanner;

class HelloWorld {

public static void main(String[] args) {

Scanner scanner=new Scanner(System.in);

int size=scanner.nextInt();

int[] arr=new int[size];

System.out.println("enter elements of array:");

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

{

arr[i]=scanner.nextInt();

}

int max=arr[0];

for(int i=1;i<size;i++)

{

if(arr[i]>max)

max=arr[i];

}

System.out.println(max);

}

}

**Second max number**

import java.util.Scanner;

class HelloWorld {

public static void main(String[] args) {

Scanner scanner=new Scanner(System.in);

int size=scanner.nextInt();

int[] arr=new int[size];

System.out.println("enter elements of array:");

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

{

arr[i]=scanner.nextInt();

}

int largest=arr[0];

for(int i=1;i<size;i++)

{

if(arr[i]>largest) largest=arr[i];

}

int s\_largest=-1;

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

if(arr[i]>s\_largest && arr[i]!=largest) s\_largest=arr[i];

}

System.out.println(s\_largest);

}

}

**Sunlight for the building**

import java.util.Scanner;

public class Main{

public static void main(String[] args) {

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

array[i]=scanner.nextInt();

}

int count=1;

int largest=arr[0];

for(int i=1;i<size;i++)

{

if(arr[i]>largest) {

largest=arr[i];

count++;

}

}

System.out.println(count);

}

}

**LINEAR SEARCH (SEARCHING NUMBER IN THE STRING)**

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

Scanner scan= new Scanner(System.in);

System.out.print("enter the size of the array: ");

int size = scan.nextInt();

int[] array = new int[size];

System.out.println("enter the element of the array: ");

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

array[i] = scan.nextInt();

}

System.out.println("enter the key to search: ");

int key = scan.nextInt();

int index=0, count=0;

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

if(array[i]==key){

count++;

index=i;

break;

}

}

if(count>0) { System.out.println("yes element exist in index "+index); }

else{System.out.println("element not there in array");}

}

}

**BINARY SEARCH**

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

Scanner scan= new Scanner(System.in);

System.out.print("enter the size of the array: ");

int size = scan.nextInt();

int[] array = new int[size];

System.out.println("enter the element of the array: ");

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

array[i] = scan.nextInt();

}

System.out.println("enter the key to search: ");

int key=scan.nextInt();

int index= -1,s=0,e=size-1;

while (s<=e){

int m=s+(e-s)/2;

if (array[m]==key) {

index=m;

break;

}

if (array[m]>key) e=m-1;

else s=m+1;

}

if (index != -1) System.out.println("yes, element exists at index "+index);

else System.out.println(" element does not exist");

}

}

**EVEN AND ODD IN THE STRING**

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

int[] array =new int[size];

System.out.println("enter the elements of the array: ");

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

array[i] = scan.nextInt();

}

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

if(array[i]%2==0) System.out.println(array[i]);

}

}

}

**COUNT OF AN EVEN NUMBERS IN THE ARRAY**

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

Scanner scan= new Scanner(System.in);

System.out.print("enter the size of the array: ");

int size= scan.nextInt();

int[] array = new int[size];

System.out.println("enter the element of the array: ");

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

array[i] = scan.nextInt();

}

int count=0,even=0,index=0;

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

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

count++;

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

continue;

}

}

System.out.println(count);

}

}

**ADDING OF EVEN NUMBERS IN THE GIVEN ARRAY**

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

Scanner scan= new Scanner(System.in);

System.out.print("enter the size of the array: ");

int size= scan.nextInt();

int[] array = new int[size];

System.out.println("enter the element of the array: ");

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

array[i] = scan.nextInt();

}

int count=0,even=0,index=0,sum=0;

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

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

count++;

sum=array[i]+array[i];

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

continue;

}

}

System.out.println(count);

}

}

**NUMBER OF 1 AND 0 IN THE GIVEN STRING**

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

Scanner scan= new Scanner(System.in);

System.out.print("enter the size of the array: ");

int size= scan.nextInt();

int[] array = new int[size];

System.out.println("enter the element of the array: ");

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

array[i] = scan.nextInt();

}

int count=0,even=0,index=0,count1=0;

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

if(array[i]==0){

count++;

}

if(array[i]==1){

count1++;

}

}

System.out.println(count);

System.out.println(count1);

}

}

**SAME AS ABOVE BUT THE HAST NUMBERS ARE 0 THEY NOT PRINTED**

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

Scanner scan= new Scanner(System.in);

System.out.print("enter the size of the array: ");

int size= scan.nextInt();

int[] array = new int[size];

System.out.println("enter the element of the array: ");

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

array[i] = scan.nextInt();

}

int[] hash=new int[10];

for (int i=0;i<size;i++) hash[array[i]]++;

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

if(hash[i]!=0){

System.out.println(i+" "+hash[i]);

}

}

}

}

**SAME AS ABOVE BUT EVEN NUMBER OF ACCURANCE**

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

Scanner scan= new Scanner(System.in);

System.out.print("enter the size of the array: ");

int size= scan.nextInt();

int[] array = new int[size];

System.out.println("enter the element of the array: ");

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

array[i] = scan.nextInt();

}

int[] hash=new int[10];

for (int i=0;i<size;i++) hash[array[i]]++;

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

if(hash[i]!=0)

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

System.out.println(i+" "+hash[i]);

}

}

}

}

**Problem statment**

The statement is that the person giftes the gifts to they friends in the way that the gifts are 2 3 4 1 have gifted to the 1 2 3 4 they recevied gifts from 4 1 2 3 now type the code for this problem statment:

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

Scanner scan= new Scanner(System.in);

int n= scan.nextInt();

int[] array = new int[n+1];

for(int i=1;i<=n;i++) {

int k=scan.nextInt();

array[k]=i;

}

for(int i=1;i<=n;i++);{

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

}

}

}

**Reverse of a string**

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

Scanner scan= new Scanner(System.in);

System.out.print("enter the size of the array: ");

int size= scan.nextInt();

int[] array = new int[size];

System.out.println("enter the element of the array: ");

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

array[i] = scan.nextInt();

}

int temp;

for(int i=0,j=size-1;i<size/2;i++,j--) {

temp=array[i];

array[i]=array[size-1-i];

array[j]=temp;

}

for (int i=0;i<size;i++) System.out.print(array[i]+" ");

}

}

**Half reversing of the given string**

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

Scanner scan= new Scanner(System.in);

System.out.print("enter the size of the array: ");

int size= scan.nextInt();

int[] array = new int[size];

System.out.println("enter the element of the array: ");

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

array[i] = scan.nextInt();

}

int temp;

for(int i=0,j=(size/2)-1;i<size/4;i++,j--) {

temp=array[i];

array[i]=array[j];

array[j]=temp;

}

for (int i=0;i<size;i++) System.out.print(array[i]+" ");

}

}