//Program on basic operations

public class Twentyseven\_july {

public static void main(String args[])

{

int a=Integer.parseInt(args[0]);

int b=Integer.parseInt(args[1]);

System.out.println("The value of a is"+a);

System.out.println("The value of b is"+b);

System.out.println("The value of a+b is"+(a+b));

System.out.println("The value of a-b is"+(a-b));

System.out.println("The value of a\*b is"+(a\*b));

System.out.println("The value of a/b is"+(a/b));

System.out.println("The value of a%b is"+(a%b));

}

}

//Program on datatypes

public class JavaProgram{

public static void main(String args[]){

byte b=-128;

double f=1.2;

boolean a=true;

float f1=1;

float f2=1.2323f;

float f3=987654321.1234567f;

float f4=6.123456789f;

double f5=987654321.1234567f;

double f6=6.123456789f;

System.out.println("Byte :"+b);

System.out.println("Double1:"+f);

System.out.println("Boolean:"+a);

System.out.println("Float1:"+f1);

System.out.println("FLoat2:"+f2);

System.out.println("FLoat3:"+f3);

System.out.println("FLoat4:"+f4);

System.out.println("Double2:"+f5);

System.out.println("Double3:"+f6);

}

}

//Program on Narrowing and widening Casting

public class JavaProgram{

public static void main(String args[]){

int a1=17,a2=017,a3=0x17;

double d1=a1;

char c1='a';

int i4=c1;

int i5=(int)f3;

int i6=2552222;

char c2=(char)i6;

float f7=(float)f5;

System.out.println("Int1:"+a1);

System.out.println("Int Octal:"+a2);

System.out.println("Int Hexa:"+a3);

System.out.println("Widening casting from int to double:"+d1);

System.out.println("Widening Casting from char to int:"+i4);

System.out.println("Narrowing Casting from double to int:"+d1);

System.out.println("Narrowing Casting from float to int:"+f7);

System.out.println("Narrowing Casting from int to char:"+c2);

}

}

//Program using CommandLine arguments

public class Commandlinearg {

static public void main(String[]args) {

int i1=Integer.parseInt(args[0]);

float i2=Float.parseFloat(args[1]);

float c=i1/i2;

System.out.println(i1+i2);

System.out.println("Result is:"+i1+i2+20);

System.out.println("Result is eq:"+i1+i2+args[2]);

System.out.println("Output"+c);

}

}

//Program to find out if it is a alphabet or digit or Special char

public class Characterinput {

public static void main(String args[])

{

char a1='%';

if ((a1>=65 & a1<=90)||(a1>=97 & a1<=122))

System.out.println("Alphabet");

else if (a1>='0' & a1<='9')

System.out.println("Digit");

else

System.out.println("Special Character");

}

}

//Program using if, else if,else

public class Characterinput {

public static void main(String args[])

{

char c='z';

if( c=='R'||c=='r')

System.out.println("Red");

else if ( c=='b'||c=='B')

System.out.println("Blue");

else if ( c=='g'||c=='G')

System.out.println("Green");

else if ( c=='o'||c=='O')

System.out.println("Orange");

else if ( c=='y'||c=='Y')

System.out.println("Yellow");

else if ( c=='w'||c=='W')

System.out.println("White");

else

System.out.println("Invalid input");

}

}

//Program using switch case

public class Characterinput {

public static void main(String args[])

{

int w=Integer.parseInt(args[0]);

switch(w) {

case 1:

System.out.println("Sunday");

break;

case 2:

System.out.println("Monday");

break;

case 3:

System.out.println("Tuesday");

break;

case 4:

System.out.println("Wednesday");

break;

case 5:

System.out.println("Thursday");

break;

case 6:

System.out.println("Friday");

break;

case 7:

System.out.println("Saturday");

break;

default:

System.out.println("Invalid input");

break;

}

}

}

//Program using for loop

public class Characterinput {

public static void main(String args[])

{

if (args.length==0)

System.out.println("No Values");

for(int n=1;n<args.length;n=n+1) {

System.out.print(args[n]+',');

}

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

for(int i=10;i<=14;i=i+1) {

if (i%2==0)

System.out.println(i);

}

}

}

//Program to find out if a number is prime or not

public class Primenumber {

public static void main(String args[])

{

int num=Integer.parseInt(args[0]);

int count=0;

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

{

if(num%i==0)

count++;

}

if(count==0)

System.out.println("It is Prime");

else

System.out.println("Not prime");

}

}

//Program to find individual sum of a number

public class IndividualSum{

public static void main(String args[])

{

int z=1234,sum=0,r;

while(z>0)

{

r=z%10;

sum=sum+r;

z=z/10;

}

System.out.println("Sum of the number is"+sum);

}

}

//Program to reverse the number

public class ReversedNo{

public static void main(String args[])

{

int a = 1234, rev = 0;

while(a!= 0)

{

int d = a % 10;

rev = rev \* 10 + d;

a= a/10;

}

System.out.println("Reversed number of 1234 is "+rev);

}

}

//Program to find check if a no is palindrome or not

public class Palindrome{

public static void main(String args[])

{

int x=Integer.parseInt(args[1]);

a=x;

r=0;

while(x>0)

{

int q=x%10;

r=r\*10+q;

x=x/10;

}

if(a==r)

System.out.println("Number is a Palindrome ");

else

System.out.println("Not a Palindrom ");

}

}

//Program on arrays

public class Arrays {

public static void main(String[] args) {

/\*\*

int len=args.length;

if(len==0)

System.out.println("No arguments given");

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

{

System.out.println((i+1)+' '+args[i]);

}

}

}

//Program to print the index of a no in array

public class Arrays {

public static void main(String[] args) {

int[]source={100,200,300};

int[]dest=new int[3];

System.arraycopy(source,0,dest,0,source.length);

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

{

System.out.println("Element ar index"+i+' '+dest[i]);

}

}

}

//Program to print the char value from ascii no

public class Arrays {

public static void main(String[] args) {

int []asciiarray= {96,97,98,99,100,101,102,103,104,105};

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

{

System.out.println((i+1)+" "+(char)asciiarray[i]);

}

for (int i=0;i<256;i++)

{

System.out.println((i+1)+" "+(char)i);

}

}

}

//Program to print the min and max values of Integer

public class Arrays {

public static void main(String[] args) {

int []arr=new int[10];

int leng=arr.length;

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

{

arr[i]=Integer.parseInt(args[i]);

}

int sum=0;

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

sum=sum+arr[i];

System.out.println("Sum is"+sum);

System.out.println("Average is"+(sum/(float)leng));

int max=Integer.MAX\_VALUE;

int min=Integer.MIN\_VALUE;

System.out.println("Mamximum value "+Integer.MAX\_VALUE);

System.out.println("Minimum value"+Integer.MIN\_VALUE);

}

}

//Program to find max and minimum values among the given 10 numbers

public class Arrays {

public static void main(String[] args) {

int[]arr1={1,4,34,56,7};

int len1=arr1.length;

int key=Integer.parseInt(args[0]);

for(int i=0;i<len1;i++)

{

if (key==arr1[i])

{

System.out.println("Position of key element"+(i+1));

break;

}

else

{

System.out.println(-1);

}

}

}

}

//Program to Sort the array of elements

public class Arrays {

public static void main(String[] args) {

int []arr2= {8,493,2,10,1,221,43,0};

int len2=arr2.length;

int x=0;

for(int i=0;i<len2;i++)

{

for(int j=i+1;j<len2;j++)

{

if(arr2[i]>arr2[j])

{

x=arr2[i];

arr2[i]=arr2[j];

arr2[j]=x;

}

}

}

System.out.print("Sorted array");

for (int i=0; i<len2; i++)

{

System.out.print(arr2[i] + " ");

}

}

}

//Program to Insert an element at a specific position

public class Arrays {

public static void main(String[] args) {

int[]arr3= {1,2,3,4,5,6,7,8,9};

int len3=arr3.length;

int[]arr4=new int[len3+1];

int len4=arr4.length;

int value=Integer.parseInt(args[0]);

int position=Integer.parseInt(args[1]);

for(int i=0;i<len4;i++)

{

if(i<(position-1))

{

arr4[i]=arr3[i];

}

if(i==(position-1))

{

arr4[i]=value;

}

if(i>(position-1))

{

arr4[i]=arr3[i-1];

}

System.out.println(arr4[i]);

}

}

//Program to Ignore the numbers 6 and 7 and cal the sum of numbers which are not in boundaries of 6 and 7

public class Arrays {

public static void main(String[] args) {

int[] arr5= {1,2,3,4,5,6,7,8,7};

int len5=arr5.length;

int totalsum = 0;

int ignoredsum=0;

int lowerbound=6;

int upperbound=7;

int result=0;

int flag=0;

for(int i=0;i<len5;i++)

{

totalsum=totalsum+arr5[i];

if(arr5[i]==lowerbound)

{

flag=1;

}

if(flag==1)

{

ignoredsum=ignoredsum+arr5[i];

}

if(arr5[i]==upperbound)

{

flag=2;

}

}

if(flag==1)

{

result=totalsum;

}

if(flag==2)

{

result=totalsum-ignoredsum;

}

System.out.println(result);

\*\*/

}

}

//Program on BufferedReader method

import java.io.BufferedReader;

import java.io.IOException;

import java.io.InputStreamReader;

public class BufferedR

{

public static void main(String[]args)throws IOException

{

BufferedReader reader=new BufferedReader(new InputStreamReader(System.in));

System.out.println("Write your name");

String name=reader.readLine();

System.out.println("Welcome"+name);

}

}

//Program on Scanner method

import java.util.Scanner;

public class scanner {

public static void main(String[]args)

{

double total\_marks=0;

double av=0;

Scanner myObj=new Scanner(System.in);

System.out.print("Enter Student name:");

String name=myObj.nextLine();

System.out.print("Enter Regd:");

int Redgno=myObj.nextInt();

System.out.print("Enter sub1 marks:");

double S1=myObj.nextDouble();

System.out.print("Enter sub2 marks:");

double S2=myObj.nextDouble();

System.out.print("Enter sub3 marks:");

double S3=myObj.nextDouble();

System.out.print("Enter sub4 marks:");

double S4=myObj.nextDouble();

System.out.print("Enter sub5 marks:");

double S5=myObj.nextDouble();

total\_marks=(S1+S2+S3+S4+S5);

av=(total\_marks/5);

System.out.println("Student name:"+name);

System.out.println("Redg no:"+Redgno);

System.out.println("Total marks"+total\_marks);

System.out.println("Average"+av);

System.out.print("Enter password");

char[] N1=System.console().readPassword();

System.out.println(N1);

}

}

**//Program on strings**

**public** **class** Stringgss {

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

{

//String inputs

String str1="HelloWelcome";

**int** len1=str1.length();

System.***out***.println(str1);

System.***out***.println(len1);

String str2=**new** String("Hellowelcome");

**int** len2=str2.length();

System.***out***.println(len2);

System.***out***.println(str2);

**char**[] helloworld= {'h','e','l','l','o'};

String hellostring=**new** String(helloworld);

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

**char**[] ch1= {'p','r','a','m','o','d','a'};

String str=**new** String(ch1);

**int** len3=str.length();

System.***out***.println(len3);

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

}

}

// Program on string methods1

**public** **class** Strings {

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

{

//String concatenation

System.***out***.println(str2.concat(str1));

System.***out***.println(str1.concat(str2));

System.***out***.println(hellostring.concat(str));

//char at particular index

**char** check=str.charAt(6);

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

**char** c=str2.charAt(7);

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

//String equals

//(==)checks the address of the strings

System.***out***.println(str1==str2);

System.***out***.println(str1.equals(str2));

System.***out***.println(str1.equalsIgnoreCase(str2));

//compareTo()

System.***out***.println(str1.compareTo(str2));

System.***out***.println(str1.compareToIgnoreCase(str2));

//startsWith() and endsWith()

System.***out***.println("Hello".startsWith("He"));

System.***out***.println("January".endsWith("ryyy"));

}

}

}

// Program on string methods2

**public** **class** Stringgsss {

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

{

//indexOf()

String str3="Today is Friday";

System.***out***.println(str3.indexOf("j"));

System.***out***.println(str3.indexOf("iday"));

System.***out***.println(str3.indexOf('a'));

System.***out***.println(str3.indexOf('a',4));

System.***out***.println(str3.indexOf('a',str3.indexOf('a')+1));

System.***out***.println(str3.indexOf("day",3));

//lastIndexOf()

String str4="Hi how are you?";

System.***out***.println(str4.lastIndexOf("o"));

//Substring

String str5=**new** String("This is a class");

**for**(**int** i=0;i<str5.length();i++)

{

System.***out***.print(str5.substring(2,32));

}

}

}

// Program on console

**public** **class** Console {

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

{

**char**[] name=System.*console*().readPassword();

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

}

}

// Programs on strings

**public** **class** Problemsonstrings {

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

{

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

String s1=sc.nextLine();

**int** len1=s1.length();

s1=s1.trim();

**int** count=0;

**for**(**int** i=0;i<len1;i++)

{

**if**(s1.charAt(i)=='\s'&& s1.charAt(i-1)!='\s' )

{

count++;

}

}

System.***out***.println(count+1);

}

}