import java.util.Scanner;

class StrRev {

public static void main(String args[]) {

String str,rev = "";

Scanner read = new Scanner(System.in);

System.out.print("Enter a string: ");

str = read.nextLine();

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

rev = rev + str.charAt(i);

}

System.out.print("The reversed string is: " +rev);

}

}

import java.util.Scanner;

class SecondSmall {

public static void main(String[] args) {

int n, min, temp;

Scanner read = new Scanner(System.in);

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

n = read.nextInt();

int a[] = new int[n];

System.out.print("Enter array elements: ");

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

a[i] = read.nextInt();

}

for(int i = 0; i<2; i++) {

min = i;

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

if(a[j]<a[min]) {

min = j;

}

}

if(min!=i) {

temp = a[min];

a[min] = a[i];

a[i] = temp;

}

}

System.out.println("The second smallest element in the array is " +a[1]);

}

}

import java.util.Scanner;

class Prime {

public static void main(String[] args) {

int n, f = 0,i = 2;

Scanner read = new Scanner(System.in);

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

n = read.nextInt();

while(i<(n/i)) {

if(n%i == 0) {

System.out.println("The given number is not a prime number.");

f = 1;

break;

}

i++;

}

if(f == 0) {

System.out.println("The given number is a prime number.");

}

}

}

import java.util.Scanner;

class Transpose {

public static void main(String[] args) {

int m, n;

Scanner read = new Scanner(System.in);

System.out.print("Enter the dimensions of the matrix: ");

m = read.nextInt();

n = read.nextInt();

int a[][] = new int[m][n];

int b[][] = new int[n][m];

System.out.println("Enter the matrix elements: ");

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

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

a[i][j] = read.nextInt();

b[j][i] = a[i][j];

}

}

System.out.println("The transpose of the given matrix is: ");

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

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

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

}

System.out.println();

}

}

}

import java.util.Scanner;

import java.lang.Math;

class Shape {

double area(double l, double b) {

return l\*b;

}

double area(double a, double b, double c) {

double s = (a+b+c)/2;

return Math.sqrt(s\*(s-a)\*(s-b)\*(s-c));

}

double area(double r) {

return 3.1415\*r\*r;

}

}

class MethodOverload {

public static void main(String[] args) {

double a, b, c, area;

Shape obj = new Shape();

Scanner read = new Scanner(System.in);

System.out.print("Enter the radius of the circle: ");

a = read.nextDouble();

area = obj.area(a);

System.out.println("The area of the circle is "+area);

System.out.print("Enter the dimensions of the rectangle: ");

a = read.nextDouble();

b = read.nextDouble();

area = obj.area(a,b);

System.out.println("The area of the rectangle is "+area);

System.out.print("Enter the sides of the triangle: ");

a = read.nextDouble();

b = read.nextDouble();

c = read.nextDouble();

area = obj.area(a,b,c);

System.out.println("The area of the triangle is "+area);

}

}

import java.util.Scanner;

class Fib {

void fib(int a, int b, int n) {

if (n <= 0) {

return;

}

else if(a+b == 0) {

if(n>1) {

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

System.out.print(b+1+" ");

fib(a, b+1, n-2);

}

else if(n == 1) {

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

}

else {

return;

}

}

else {

System.out.print(a+b+ " ");

fib(b, a+b, n-1);

}

}

}

class Fibonacci {

public static void main(String[] args) {

int n;

Scanner read = new Scanner(System.in);

Fib obj = new Fib();

System.out.print("Enter the no of terms to be printed: ");

n = read.nextInt();

obj.fib(0,0,n);

}

}