// 1 . Write a Java program to print the sum of two numbers

public class SumOfNum

{

public static void main(String args[])

{

int n1 = 225, n2 = 115, sum;

sum = n1 + n2;

System.out.println("The sum of numbers is: "+sum);

}

}

// 2. Write a Java program to accept a number and check the number is even or not. Prints 1 if the number is even or 0 if the number is odd

import java.util.\*;

public class ifelse {

public static void main(String[] args){

Scanner in = new Scanner(System.in);

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

int n = in.nextInt();

if (n % 2 == 0) {

System.out.println(1);

}

else {

System.out.println(0);

}

}

}

// 3. Write a Java program to print the sum (addition), multiply, subtract, divide and remainder of two numbers arithmetic operation will be of user choice.

import java.util.Scanner;

public class sum {

public static void main(String[] args) {

Scanner in = new Scanner(System.in);

System.out.print("Input first number: ");

int num1 = in.nextInt();

System.out.print("Input second number: ");

int num2 = in.nextInt();

System.out.println(num1 + " + " + num2 + " = " +

(num1 + num2));

System.out.println(num1 + " - " + num2 + " = " +

(num1 - num2));

System.out.println(num1 + " x " + num2 + " = " +

(num1 \* num2));

System.out.println(num1 + " / " + num2 + " = " +

(num1 / num2));

System.out.println(num1 + " mod " + num2 + " = " +

(num1 % num2));

}

}

// 4 // 5. Write a Java program and compute the sum of the digits of an integer. Go to the editor Input Data: Input an integer: 25 Expected Output 5. The sum of the digits is: 7

import java.util.Scanner;

public class sumofdigit {

public static void main(String[] args)

{

Scanner in = new Scanner(System.in);

System.out.print("Input an integer: ");

int digits = in.nextInt();

System.out.println("The sum is " + sumDigits(digits));

}

public static int sumDigits(long n) {

int result = 0;

while(n > 0) {

result += n % 10;

n /= 10;

}

return result;

}

}

// 6. Write a Java program to reverse a string

import java.util.Scanner;

public class strrev {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

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

char[] letters = scanner.nextLine().toCharArray();

System.out.print("Reverse string: ");

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

System.out.print(letters[i]);

}

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

}

}

// 7. Write a Java program to count the letters, spaces, numbers and other characters of an input string.

import java.util.Scanner;

public class strcount {

public static void main(String[] args) {

String test = " Hello World 1 2 3 ";

count(test);

}

public static void count(String x){

char[] ch = x.toCharArray();

int letter = 0;

int space = 0;

int num = 0;

int other = 0;

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

if(Character.isLetter(ch[i])){

letter ++ ;

}

else if(Character.isDigit(ch[i])){

num ++ ;

}

else if(Character.isSpaceChar(ch[i])){

space ++ ;

}

else{

other ++;

}

}

System.out.println("The string is : Hello World 1 2 3");

System.out.println("letter: " + letter);

System.out.println("space: " + space);

System.out.println("number: " + num);

System.out.println("other: " + other);

}

}

//8. Write a Java program to print the ascii value of a given character.

import java.util.Scanner;

public class PrintAsciiValueExample4

{

public static void main(String args[])

{

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

Scanner sc = new Scanner(System.in);

char chr = sc.next().charAt(0);

int asciiValue = chr;

System.out.println("ASCII value of " +chr+ " is: "+asciiValue);

}

}

// 9. Write a Java program to display the system time.

public class Exercise46 {

public static void main(String[] args){

System.out.format("\nCurrent Date time: %tc%n\n", System.currentTimeMillis());

}

}

// 10. Write a Java program to print the odd numbers from 1 to 9. Prints one number per line.

import java.util.\*;

public class noOfline {

public static void main(String[] args){

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

if (i % 2 != 0) {

System.out.println(i);

}

}

}

}

// 11. Write a Java program to capitalize the first letter of each word in a sentence.

import java.util.\*;

public class capitalStr {

public static void main(String[] args){

Scanner in = new Scanner(System.in);

System.out.print("Input a Sentence: ");

String line = in.nextLine();

String upper\_case\_line = "";

Scanner lineScan = new Scanner(line);

while(lineScan.hasNext()) {

String word = lineScan.next();

upper\_case\_line += Character.toUpperCase(word.charAt(0)) + word.substring(1) + " ";

}

System.out.println(upper\_case\_line.trim());

}

}

//12. Write a Java program to reverse a word

import java.util.\*;

public class wordrev {

public static void main(String[] args){

Scanner in = new Scanner(System.in);

System.out.print("\nInput a word: ");

String word = in.nextLine();

word = word.trim();

String result = "";

char[] ch=word.toCharArray();

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

result += ch[i];

}

System.out.println("Reverse word: "+result.trim());

}

}

// 13 // 14 //15 . Write a Java program to get the larger value between first and last element of an array (length 3) of integers. Go to the editor Sample Output: 14. Original Array: [20, 30, 40] 15. Larger value between first and last element: 40

import java.util.Arrays;

public class maxSize {

public static void main(String[] args)

{

int[] array\_nums = {20, 30, 40};

System.out.println("Original Array: "+Arrays.toString(array\_nums));

int max\_val = array\_nums[0];

if(array\_nums[2] >= max\_val)

max\_val = array\_nums[2];

System.out.println("Larger value between first and last element: "+max\_val);

}

}

// 16. Write a Java program to sort array elements.

public class SortAsc {

public static void main(String[] args) {

//Initialize array

int [] arr = new int [] {5, 2, 8, 7, 1};

int temp = 0;

//Displaying elements of original array

System.out.println("Elements of original array: ");

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

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

}

//Sort the array in ascending order

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

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

if(arr[i] > arr[j]) {

temp = arr[i];

arr[i] = arr[j];

arr[j] = temp;

}

}

}

System.out.println();

//Displaying elements of array after sorting

System.out.println("Elements of array sorted in ascending order: ");

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

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

}

}

}

// 17. Write a program to add two numbers using function overloading.

class Adder{

static int add(int a,int b){return a+b;}

static int add(int a,int b,int c){return a+b+c;}

}

class TestOverloading1{

public static void main(String[] args){

System.out.println(Adder.add(11,11));

System.out.println(Adder.add(11,11,11));

}}

// 18. Write a program to input Employee Details and display it on proper format.

import java.util.\*;

public class EmpData

{

public static void main(String args[])

{

Scanner sc = new Scanner(System.in);

String ename;

System.out.println("enter the ename of Employee :-");

ename=sc.nextLine();

int eid;

System.out.println("enter the eid of Employee:-");

eid=sc.nextInt();

int Salary;

System.out.println("enter the Salary of Employee :-");

Salary=sc.nextInt();

System.out.println();

System.out.println("eid : "+eid);

System.out.println("ename : "+ename);

System.out.println("Salary : "+Salary);

}

}

//19. Write a program to design three classes that accept dimension of triangle and rectangle and calculate area of rectangle and triangle

import java.util.Scanner;

class AreaOfTriangle

{

void Triangle()

{

Scanner s= new Scanner(System.in);

System.out.println("Enter the width of the Triangle:");

double b= s.nextDouble();

System.out.println();

System.out.println("Enter the height of the Triangle:");

double h= s.nextDouble();

//Area = (width\*height)/2

double area=(b\*h)/2;

System.out.println("Area of Triangle is: " + area);

}

}

class AreaOfRectangle extends AreaOfTriangle

{

void Rectangle()

{

Scanner a= new Scanner(System.in);

System.out.println("Enter the width of the Rectangle:");

double b1= a.nextDouble();

System.out.println();

System.out.println("Enter the height of the Rectangle:");

double h1= a.nextDouble();

//Area = (width\*height)

double area1=(b1\*h1);

System.out.println("Area of Rectangle is: " + area1);

}

public static void main(String args[])

{

AreaOfRectangle a1 = new AreaOfRectangle();

a1.Triangle();

System.out.println();

a1.Rectangle();

}

}

//20. Write a program which design Bank Account class as Saving and Current Account and manage information accordingly

class bankAccount

{

private static int nextAccountNumber = 1;

private String person;

private int number;

private double balance;

bankAccount(String p, double b)

{

person = p;

balance = b;

number = nextAccountNumber;

nextAccountNumber += 1;

}

public int getNumber()

{

return number;

}

public String getName()

{

return person;

}

public double getBalance()

{

return balance;

}

public void deposit(double a)

{

balance += a;

}

}

//21. Write a program which design a class name Fan to represent fan properties according to these properties Fan operation will be performed.

class Fan

{

public static final int SLOW=1,MEDIUM=2,FAST=3;

int speed;

boolean f\_on;

double radius;

String color;

Fan()

{

speed=SLOW;

f\_on=false;

radius=4;

color="blue";

}

Fan(int speed ,double radius , String color , boolean f\_on)

{

this.speed=speed;

this.radius=radius;

this.color=color;

this.f\_on=f\_on;

}

void display()

{

if(f\_on==true)

{

System.out.println("Fan is on \n the speed is ="+speed+"\n the color is ="+color+"\n the radius is ="+radius);

}

else

{

System.out.println("Fan is off \n the color of fan is ="+color+"\n the radius of fan is ="+radius);

}

}

public static void main(String [] args)

{

Fan obj = new Fan();

Fan obj1 = new Fan(MEDIUM,6,"brown",true);

obj.display();

obj1.display(); }}