

**Seguimiento 3 POO**

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[Repositorio git](https://github.com/Xetriflo/Seguimiento-3-POO-2022-2)

Punto 18

package milo**.**ejmplo18**;**

public class Ejmplo18 **{**

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

nomina nom **=** **new** nomina**();**

nom**.**setVisible**(true);**

**}**

**}**

package milo**.**ejmplo18**;**

//metodos utilizados en la java class

public class Salario **{**

public static double salario\_bruto**(**double hora**,** double valor\_hora**){**

double salariobruto**;**

salariobruto**=**hora**\***valor\_hora**;**

**return** salariobruto**;**

**}**

public static double porcentaje\_retencion**(**double hora**,** double valor\_hora**,** double retencion**){**

double retenido**;**

retenido **=((**hora**\***valor\_hora**)\***retencion**)/**100**;**

**return** retenido**;**

**}** public static double salario\_neto**(**double hora**,** double valor\_hora**,** double retencion**){**

double salafinal**;**

salafinal **=** **(**hora**\***valor\_hora**)-(((**hora**\***valor\_hora**)\***retencion**)/**100**);**

**return** salafinal**;**

**}**

**}**

//back end del boton cacular y borrar

private void btn\_borrarActionPerformed**(**java**.**awt**.**event**.**ActionEvent evt**)** **{**

txtnombre**.**setText**(**""**);**

txtcodigo**.**setText**(**""**);**

txthora**.**setText**(**""**);**

txtvalor\_hora**.**setText**(**""**);**

txt\_retencion**.**setText**(**""**);**

txt\_salariobruto**.**setText**(**""**);**

txt\_salarioneto**.**setText**(**""**);**

**}**

private void btncalcularActionPerformed**(**java**.**awt**.**event**.**ActionEvent evt**)** **{**

**try{**

double hora**,** valor\_hora**,**retencion**;**

hora**=** Double**.**parseDouble**(**txthora**.**getText**());**

valor\_hora**=** Double**.**parseDouble**(**txtvalor\_hora**.**getText**());**

retencion**=** Double**.**parseDouble**(**txt\_retencion**.**getText**());**

txt\_salariobruto**.**setText**(**String**.**valueOf**(**Salario**.**salario\_bruto**(**hora**,** valor\_hora**)));**

txt\_salarioneto**.**setText**(**String**.**valueOf**(**Salario**.**salario\_bruto**(**hora**,** valor\_hora**)));**

**}** **catch(**NumberFormatException ex**){**

JOptionPane**.**showMessageDialog**(null,** "tienen que ser numeros "**);**

**}**

**Punto 19 capitulo 3**

package milo**.**punto19**;**

public class Punto19 **{**

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

triangulo tri **=** **new** triangulo**();**

tri**.**setVisible**(true);**

**}**

**}**

package milo**.**punto19**;**

public class calculos **{**

public static double calcular\_perimetro**(**double lado**){**

double perimetro**;**

perimetro**=**lado**\***3 **;**

**return** perimetro**;**

**}**

public static double calcular\_altura **(**double lado**)** **{**

double altura**;**

altura **=** **(**lado**\*** Math**.**sqrt **(**3**))/**2**;**

**return** altura**;**

**}**

public static double calcular\_area **(**double lado**)** **{**

double area**;**

area **=** **(**Math**.**pow**(**lado**,**2**)\***Math**.**sqrt **(**3**))/**4**;**

**return** area**;**

**}**

**}**

private void btncalcularActionPerformed**(**java**.**awt**.**event**.**ActionEvent evt**)** **{**

double lado**;**

**try{**

lado**=** Double**.**parseDouble**(**txtlado**.**getText**());**

txtperimetro**.**setText**(**String**.**valueOf**(**calculos**.**calcular\_perimetro**(**lado**)));**

txtaltura**.**setText**(**String**.**valueOf**(**calculos**.**calcular\_altura**(**lado**)));**

txtarea**.**setText**(**String**.**valueOf**(**calculos**.**calcular\_area**(**lado**)));**

**}**

**catch(**NumberFormatException ex**){**

JOptionPane**.**showMessageDialog**(null,** "tienen que ser numeros"**);**

**}**

**}**

private void jButton2ActionPerformed**(**java**.**awt**.**event**.**ActionEvent evt**)** **{**

txtlado**.**setText**(**" "**);**

txtperimetro**.**setText**(**" "**);**

txtaltura**.**setText**(**" "**);**

txtarea**.**setText**(**" "**);**

**}**

Punto 10 capitulo 4

package milo**.**punto10cap4**;**

public class Punto10cap4 **{**

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

matricula matri **=** **new** matricula**();**

matri**.**setVisible**(true);**

**}**

**}**

package milo**.**punto10cap4**;**

public class calculos **{**

public static double calcular\_matricula**(**double patri**,** int estrato**){**

double matricula**=**50000**;**

**if(**patri**>** 2000000 **&&** estrato**>**3**){**

matricula**=((**patri**\***3**)/**100**);**

**return** matricula**;**

**}else{**

**return** matricula**;**

**}**

**}**

**}**

private void btncalcularActionPerformed**(**java**.**awt**.**event**.**ActionEvent evt**)** **{**

double patrimonio**;**

int estrato**;**

**try{**

patrimonio**=** Double**.**parseDouble**(**txtpatrimonio**.**getText**());**

estrato**=** Integer**.**parseInt**(**txtestrato**.**getText**());**

txtmatricula**.**setText**(**String**.**valueOf**(**calculos**.**calcular\_matricula**(**patrimonio**,** estrato**)));**

**}**

**catch(**NumberFormatException ex**){**

JOptionPane**.**showMessageDialog**(null,** "tienen que ser numeros "**);**

**}**

**}**

private void btnborrarActionPerformed**(**java**.**awt**.**event**.**ActionEvent evt**)** **{**

txtmatricula**.**setText**(**""**);**

txtnumero**.**setText**(**""**);**

txtnombre**.**setText**(**""**);**

txtestrato**.**setText**(**""**);**

txtpatrimonio**.**setText**(**""**);**

**}**

Punto 7 capitulo 4

package milo**.**punto7cap4**;**

public class Punto7cap4 **{**

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

numeromayor num **=** **new** numeromayor**();**

num**.**setVisible**(true);**

**}**

**}**

private void btncalcularActionPerformed**(**java**.**awt**.**event**.**ActionEvent evt**)** **{**

int a**,** b**;**

**try{**

a**=** Integer**.**parseInt**(**txta**.**getText**());**

b**=** Integer**.**parseInt**(**txtb**.**getText**());**

**if** **(**a**>**b**){**

JOptionPane**.**showMessageDialog**(null,** "El mayor es "**+**a**);**

**}else** **if** **(**b **>** a**){**

JOptionPane**.**showMessageDialog**(null,** "El mayor es "**+**b**);**

**}else** **{**

JOptionPane**.**showMessageDialog**(null,** "Son iguales "**);**

**}**

**}**

**catch(**NumberFormatException ex**){**

JOptionPane**.**showMessageDialog**(null,** "tienen que ser numeros"**);**

**}**

**}**

private void jButton2ActionPerformed**(**java**.**awt**.**event**.**ActionEvent evt**)** **{**

txta**.**setText**(**""**);**

txtb**.**setText**(**""**);**

**}**

Punto 22

package milo**.**punto22**;**

public class Punto22 **{**

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

salario sala **=** **new** salario**();**

sala**.**setVisible**(true);**

**}**

**}**

package milo**.**punto22**;**

public class calculos **{**

public static double salario **(**double valor\_hora**,** int horas**){**

double salario **=** valor\_hora**\***horas**;**

**return** salario**;**

**}**

**}**

private void jButton1ActionPerformed**(**java**.**awt**.**event**.**ActionEvent evt**)** **{**

double salario**,** salariohora**;**

int hora**;**

String nombre**;**

**try{**

hora**=**Integer**.**parseInt**(**txthora**.**getText**());**

salariohora**=**Double**.**parseDouble**(**txtvalor**.**getText**());**

salario**=**calculos**.**salario**(**salariohora**,** hora**);**

nombre**=**txtnombre**.**getText**();**

**if** **(**salario **>** 450000**){**

JOptionPane**.**showMessageDialog**(null,**"su nombre es "**+**nombre**);**

JOptionPane**.**showMessageDialog**(null,**"su salario mensual "**+** salario**);**

**}else** **{**

JOptionPane**.**showMessageDialog**(null,**"su nombre es "**+**nombre**);**

**}**

**}** **catch(**NumberFormatException ex**){**

JOptionPane**.**showMessageDialog**(null,** "tienen que ser numeros"**);**

**}**

**}**

private void btnborrarActionPerformed**(**java**.**awt**.**event**.**ActionEvent evt**)** **{**

txthora**.**setText**(**""**);**

txtvalor**.**setText**(**""**);**

txtnombre**.**setText**(**""**);**

**}**

Punto 23

package milo**.**punto23**;**

public class Punto23 **{**

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

ecuacion ecu **=** **new** ecuacion**();**

ecu**.**setVisible**(true);**

**}**

**}**

package milo**.**punto23**;**

public class calculos **{**

public static double solu1**(**double a**,** double b**,** double c**){**

double solucion1**;**

double solucion2**;**

solucion2**=(-**c**/**b**);**

**if(**a **!=**0**){**

solucion1**=(-**b **+** Math**.**sqrt**((**b**\***b**)-(**4**\***a**\***c**)))/**2**\***a**;**

**return** solucion1**;**

**}else{**

**return** solucion2**;**

**}**

**}**

public static double solu2**(**double a**,** double b**,** double c**){**

double solucion2**;**

**if(**a **!=**0**){**

solucion2**=(-**b **-** Math**.**sqrt**((**b**\***b**)-(**4**\***a**\***c**)))/**2**\***a**;**

**return** solucion2**;**

**}**

**return** 0**;**

**}**

**}**

private void btncalcularActionPerformed**(**java**.**awt**.**event**.**ActionEvent evt**)** **{**

double a**,** b**,** c**,** sol1**,** sol2**;**

**try{**

a**=**Double**.**parseDouble**(**txta**.**getText**());**

b**=**Double**.**parseDouble**(**txtb**.**getText**());**

c**=**Double**.**parseDouble**(**txtc**.**getText**());**

sol1**=**calculos**.**solu1**(**a**,** b**,** c**);**

sol2**=**calculos**.**solu2**(**a**,** b**,** c**);**

JOptionPane**.**showMessageDialog**(null,**"Las soluciones son "**+**sol1**+** "\n" **+**sol2**);**

**}** **catch(**NumberFormatException ex**){**

JOptionPane**.**showMessageDialog**(null,** "tienen que ser numeros"**);**

**}**

**}**

private void btnborrarActionPerformed**(**java**.**awt**.**event**.**ActionEvent evt**)** **{**

txta**.**setText**(**""**);**

txtb**.**setText**(**""**);**

txtc**.**setText**(**""**);**

**}**

Punto 40

package milo**.**punto40**;**

public class Punto40 **{**

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

cuadrado cua**=** **new** cuadrado**();**

cua**.**setVisible**(true);**

**}**

**}**

package milo**.**punto40**;**

public class calculos **{**

public static double raiz**(**double a**){**

double raiz**;**

raiz**=** Math**.**sqrt**(**a**);**

**return** raiz**;**

**}**

public static double cuadrado**(**double a**){**

double cuadrado**;**

cuadrado**=**Math**.**pow**(**a**,** 2**);**

**return** cuadrado**;**

**}**

public static double cubo**(**double a**){**

double cubo**;**

cubo**=**Math**.**pow**(**a**,** 3**);**

**return** cubo**;**

**}**

**}** private void btncalcularActionPerformed**(**java**.**awt**.**event**.**ActionEvent evt**)** **{**

double a**;**

**try{**

a**=**Double**.**parseDouble**(**txtnumber**.**getText**());**

txtraiz**.**setText**(**String**.**valueOf**(**calculos**.**raiz**(**a**)));**

txtcuadrado**.**setText**(**String**.**valueOf**(**calculos**.**cuadrado**(**a**)));**

txtcubo**.**setText**(**String**.**valueOf**(**calculos**.**cubo**(**a**)));**

**}** **catch(**NumberFormatException ex**){**

JOptionPane**.**showMessageDialog**(null,** "tienen que ser numeros"**);**

**}**

**}**

private void btnotroActionPerformed**(**java**.**awt**.**event**.**ActionEvent evt**)** **{**

txtnumber**.**setText**(**""**);**

txtraiz**.**setText**(**""**);**

txtcuadrado**.**setText**(**""**);**

txtcubo**.**setText**(**""**);**

**}**

Punto 41

package milo**.**punto41**;**

public class Punto41 **{**

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

mayor ma**=** **new** mayor**();**

ma**.**setVisible**(true);**

**}**

**}**

private void jButton2ActionPerformed**(**java**.**awt**.**event**.**ActionEvent evt**)** **{**

tamano**[**ind**]=**Integer**.**parseInt**(**txtnumber**.**getText**());**

txtnumber**.**setText**(**""**);**

txtnumber**.**requestFocus**();**

ind**++;**

**}**

private void jButton1ActionPerformed**(**java**.**awt**.**event**.**ActionEvent evt**)** **{**

int mayor**=**0**;**

**try{**

**for** **(**int i**=**0**;** i**<**5**;** i**++){**

**if** **(**tamano**[**i**]>**mayor**){**

mayor**=**tamano**[**i**];**

**}**

**}**JOptionPane**.**showMessageDialog**(null,** "el numero mayor es "**+**mayor**);**

**}** **catch(**NumberFormatException ex**){**

JOptionPane**.**showMessageDialog**(null,** "tienen que ser numeros "**);**

**}**

**}**

Figuras

package milo**.**figurasparte2**;**

public class Figurasparte2 **{**

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

pruebafiguras pru **=new** pruebafiguras**();**

pru**.**setVisible**(true);**

**}**

**}**

package milo**.**figurasparte2**;**

public class calculos **{**

public static double areacirculo**(**double radio**){**

double area**=**Math**.**PI**\***Math**.**pow**(**radio**,**2**);**

**return** area**;**

**}**

public static double perimetrocirculo**(**double radio**){**

double perimetro**=**2**\***Math**.**PI**\***radio**;**

**return** perimetro**;**

**}**

public static double areacuadrado**(**int lado**){**

int area**=**lado**\***lado**;**

**return** area**;**

**}** public static double perimetrocuadrado**(**int lado**){**

int perimetro**=**4**\***lado**;**

**return** perimetro**;**

**}**

public static double arearectangulo**(**int base**,** int altura**){**

int area **=**base**\***altura**;**

**return** area**;**

**}** public static double perimetrorectangulo**(**int base**,** int altura**){**

int perimetro **=(**2**\***base**)+(**2**\***altura**);**

**return** perimetro**;**

**}** public static double areatriangulo**(**int base**,** int altura**){**

int area **=(**base**\***altura**)/**2**;**

**return** area**;**

**}**

public static double hipotenusatriangulo**(**int base**,** int altura**){**

double hipo**=**Math**.**sqrt**(((**base**\***base**)+(**altura**\***altura**)));**

**return** hipo**;**

**}** public static double perimetrotriangulo**(**int base**,** int altura**){**

double peri**=**base**+**altura**+**calculos**.**hipotenusatriangulo**(**base**,** altura**);**

**return** peri**;**

**}** public static double tipodetriangulo**(**int base**,** int altura**){**

int area **=**base**\***altura**;**

**if((**base**==**altura**)&&(**base**==**calculos**.**hipotenusatriangulo**(**base**,** altura**))&&(**altura**==**calculos**.**hipotenusatriangulo**(**base**,** altura**))){**

**return** 1**;** //siendo 1 triangulo equilatero

**}else** **if((**base **!=**altura**)&&(**base **!=**calculos**.**hipotenusatriangulo**(**base**,** altura**))&&(**altura**!=**calculos**.**hipotenusatriangulo**(**base**,** altura**))){**

**return** 2**;** //siendo 2 triangulo escaleno

**}else{**

**return** 3**;**//siendo 3 triagulo isosceles

**}**

**}**

**}**

private void btncalcularActionPerformed**(**java**.**awt**.**event**.**ActionEvent evt**)** **{**

double radio**,**tipo**;**

int lado**,** base**,** altura**;**

radio**=**7.6**;**

lado**=**4**;**

base**=**5**;**

altura**=**7**;**

tipo**=**calculos**.**tipodetriangulo**(**base**,** altura**);**

**try{**

txtcirculo**.**setText**(**String**.**valueOf**(**calculos**.**areacirculo**(**radio**)));**

txtpericircu**.**setText**(**String**.**valueOf**(**calculos**.**perimetrocirculo**(**radio**)));**

txtcuadrado**.**setText**(**String**.**valueOf**(**calculos**.**areacuadrado**(**lado**)));**

txtpericuadra**.**setText**(**String**.**valueOf**(**calculos**.**perimetrocuadrado**(**lado**)));**

txttriangulo**.**setText**(**String**.**valueOf**(**calculos**.**areatriangulo**(**base**,** altura**)));**

txtperitrian**.**setText**(**String**.**valueOf**(**calculos**.**perimetrotriangulo**(**base**,** altura**)));**

txtrectangulo**.**setText**(**String**.**valueOf**(**calculos**.**arearectangulo**(**base**,** altura**)));**

txtperirecta**.**setText**(**String**.**valueOf**(**calculos**.**perimetrorectangulo**(**base**,** altura**)));**

**if(**tipo**==**1.0**){**

txttipotrian**.**setText**(**"equilatero"**);**

**}else** **if(**tipo**==**2.0**){**

txttipotrian**.**setText**(**"escaleno"**);**

**}else{**

txttipotrian**.**setText**(**"isosceles"**);**

**}**

**}** **catch(**NumberFormatException ex**){**

JOptionPane**.**showMessageDialog**(null,** "tienen que ser numeros"**);**

**}**

**}**

