



INSTITUTO POLITECNICO NACIONAL
UNIDAD PROFECIONAL INTERDICIPLINARIA DE INGENIERIA CIENCIAS
SOCIALES Y ADMINISTRATIVAS

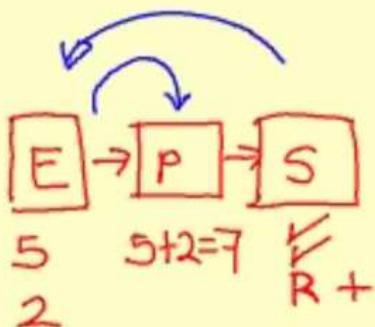
LOGICA DE PROGRAMACION
APUNTES

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SECUENCIA 1NM13

PP21104180





Algoritmo

Sencuencia de pasos

Pseudocódigo

Inicio

Var x,y,z

Imprime "Teclea x"

Lee x

Imprime "Teclea y"

Lee y

$z = x + y$

Imprime z

Fin

Programa

Algoritmo expresado en un Lenguaje de Programación.

main()

{ int x,y,z;

printf("Teclea x");

scanf("%d",&x);

printf("Teclea y");

scanf("%d",&y);

$z = x + y;$

printf("%d",z);

}

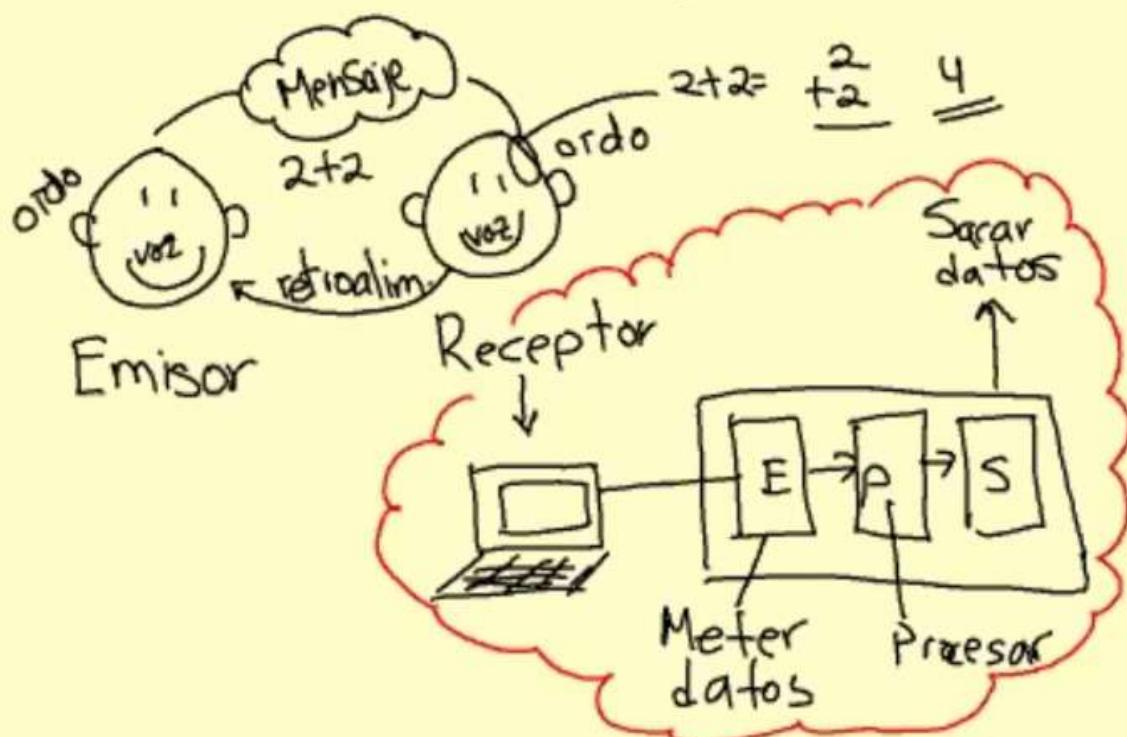
"Lógica de Programación."

Lógica → Razonamiento de
solución de problemas.

Problema → Situación que impide
alcanzar un objetivo.

Requerimientos → Necesidad → cubrir. → objetivo

Programar = Comunicación
computadora





Estructuras de Control
if
Else Si (condición) entonces Acción
Switch()
Repetición
do...while
While
for



```
if (condición)      if (condición)
{                  {
}                  }
}                  }    ②
else
{
}
}
```

```
if (condición)
{
}
else
{
    if (condición)
    {
    }
}
}    ③
```

S: completo

if (condición) entonces
[]
else ==
[]
end if

Inicio
var edad
Imprime ("Ingresa Edad")
Lee edad
if (edad > 18)
 Imprime ("Eres ciudadano")
end if
Fin

Inicio
var num
Imprime ("Ingresa numero")
Lee num
if (num > 0) entonces
 Imprime ("Es positivo")
end if
Fin

-Inicio

Var num

Imprime ("Ingresa numero")

Lee num

if (num > 0)

 Imprime ("Es positivo")

else

 if (num < 0)

 Imprime ("Es negativo")

 else

 Imprime ("Es cero")

 end if

end if

Fin

Estructuras de repetición.

for

do...while

while

for(inicial,final,incremento)

↓
decremento

for(i=0, i<10, i++)
 Imprime ("Hola")
 en for i

do...while

do

=====

Instrucción
control

while:

while(condición)

=====

Inst. control

end while

Primero evalúa y
después ejecuta

o evalúa a

Usted está viendo la pantalla de Alejandra Mendez Ver Opciones

$x = 15$

~~$x = 1$~~

~~do~~

Imprime "Hola"

$x = x + 1$

while ($x \leq 10$)

X	Imprime	$x = x + 1$	$x \leq 10$
1	Hola	$2 = 1 + 1$	$2 \leq 10$
	Hola	$3 = 2 + 1$	$3 \leq 10$
	Hola	$4 = 3 + 1$	$4 \leq 10$
	Hola	$5 = 4 + 1$	$5 \leq 10$
	Hola	$6 = 5 + 1$	$6 \leq 10$
	Hola	$7 = 6 + 1$	$7 \leq 10$
	Hola	$8 = 7 + 1$	$8 \leq 10$
	Hola	$9 = 8 + 1$	$9 \leq 10$
	Hola	$10 = 9 + 1$	$10 \leq 10$
	Hola	$11 = 10 + 1$	$11 \leq 10$
	Hola	$12 = 11 + 1$	$12 \leq 10$
	Hola	$13 = 12 + 1$	$13 \leq 10$
	Hola	$14 = 13 + 1$	$14 \leq 10$
	Hola	$15 = 14 + 1$	$15 \leq 10$
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	Hola	$215 = 214 + 1$	$215 \leq 10$
	Hola	$216 = 215 + 1$	$216 \leq 10$
	Hola	$217 = 216 + 1$	$217 \leq 10$
	Hola	$218 = 217 + 1$	$218 \leq 10$
	Hola	$219 = 218 + 1$ </td	

13
 $x = 1$
while ($x \leq 10$)

Imprime "Hola"

$x = x + 1$

end while

x	Imprime	$x = x + 1$	$x \leq 10$
1	Hola	2	$1 \leq 10 \checkmark$
	Hola	3	$2 \leq 10 \checkmark$
	Hola	4	$3 \leq 10 \checkmark$
		:	$10 \leq 10 \checkmark$
		10	$10 \leq 10 \checkmark$
	Hola	11	$11 \leq 10 X$
$x = 15$			$15 \leq 10 X$

do...while
1-n veces

while
0-n veces

Usted está viendo la pantalla de Alejandra Mendez

Ver Opciones



Pseudorígido / D. Detallado

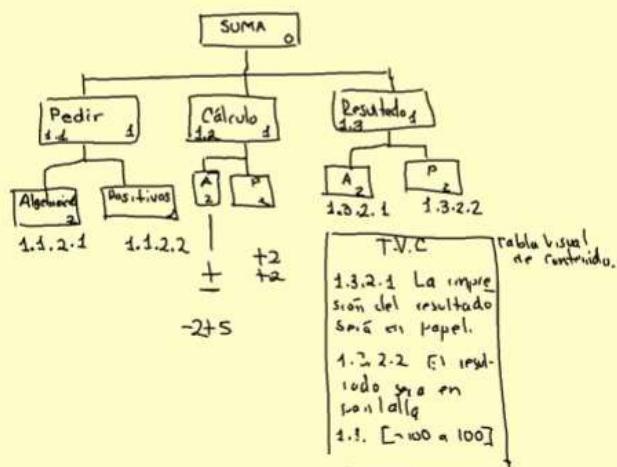
Top Down → D. General.
Wonnier

Nashishederman D. Detallado

Auxiliares:

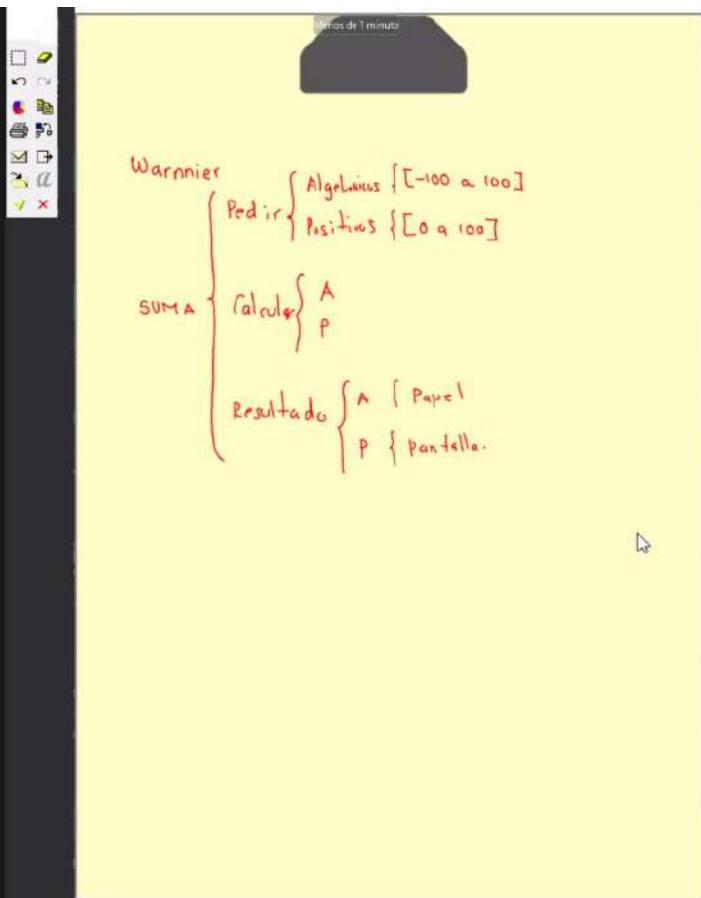
- Segmentación
- Identación
- Modularidad

TOP DOWN → (Suma) ⇒ Diagrama jerárquico



Activar Windows

Vé a Configuración para activar Windows.



Vusted està viendo la pantalla de Alejandra Mendez Ver Opciones

Warnier

$$\left\{ \begin{array}{l} \text{Pedir} \left\{ \begin{array}{l} \text{Algoritmos } [-100 \text{ a } 100] \\ \text{Positivos } [0 \text{ a } 100] \end{array} \right. \\ \text{SUMA} \left\{ \begin{array}{l} \text{Calcular} \left\{ \begin{array}{l} A \\ P \end{array} \right. \\ \text{Resultado} \left\{ \begin{array}{l} A \text{ [Papel]} \\ P \text{ [Pantalla]} \end{array} \right. \end{array} \right. \end{array} \right.$$

Nashishaderman

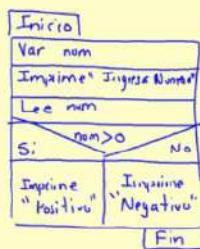
do...while

while

for

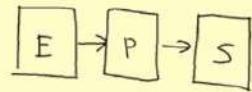
Elaborar un algoritmo que
reciba un numero e indique si es + o -.

Nashishederman





Lenguaje C.



Imprime — printf ("Texto");
printf ("Tipodato", X);

Lee — scanf ("%d", &X);

Tipos de datos

%d → Entero
%f → flotante (decimal)
%c → carácter
%s → Cadena (Muchos caracteres).

Processo

Estructuras de Control.

```

    }           valor   Valorfinal
    for ( i=0; i<10; i++ )           incremento
}                                         decremento

```

}

```
do { } while (condición); }
```

Luisped está viendo la pantalla de Alejandra Mendoza

Ver Opciones

Activar mi audio con (Alt+A). O bien mantenga presionada la tecla ESPACIO para activar temporalmente.

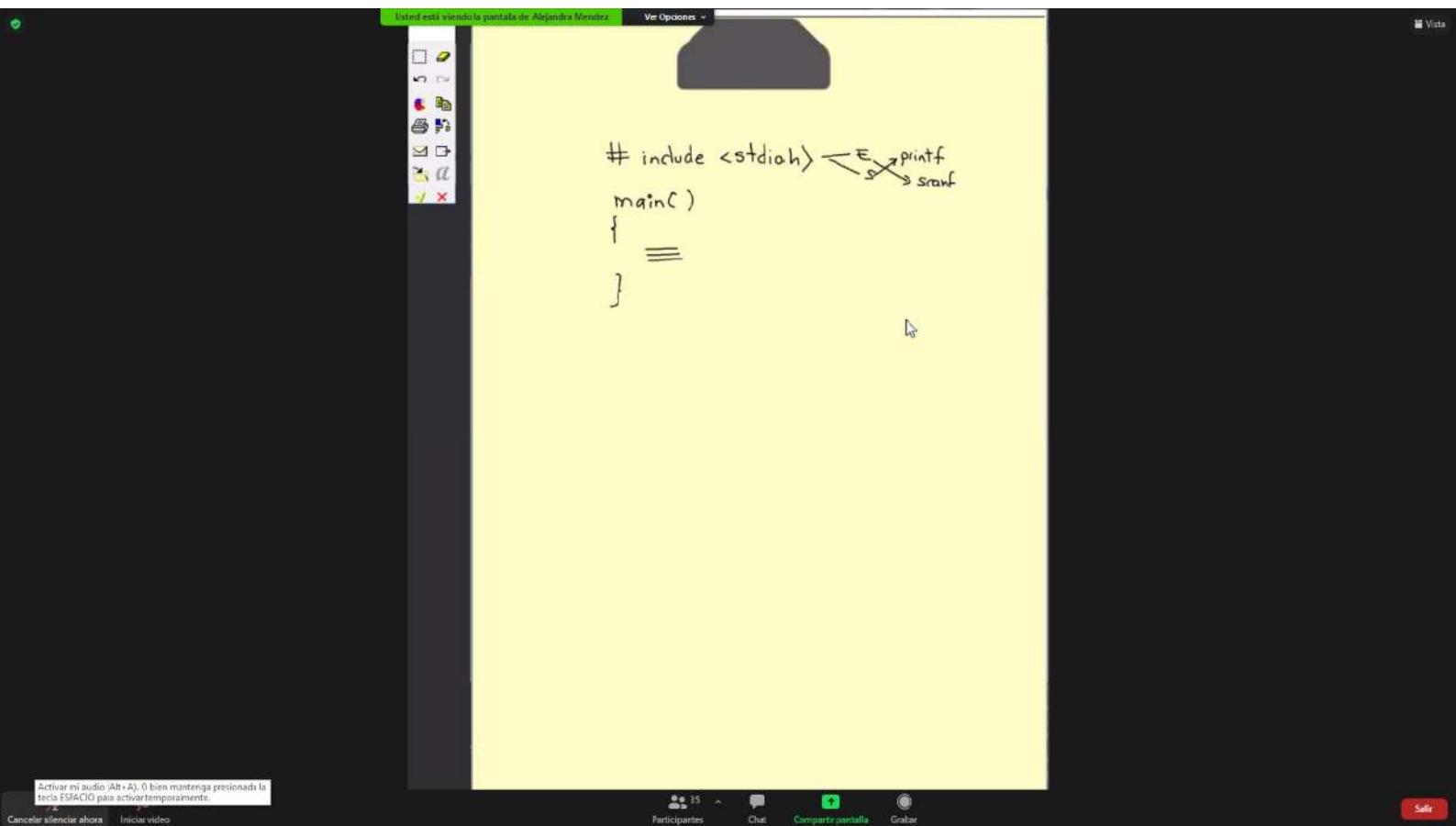
Vista

```
switch (opcion)
{
    case 'a':
        ===
        break;
    case '2':
        ===
        break;
    .
    .
    case 'n':
        ===
        break;
    default:
        ===
}
```

Cancelar silencio ahora Iniciar video

Participantes 35 Chat Compartir pantalla Gafas

Salir





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