

# INTRODUCCIÓN A C++

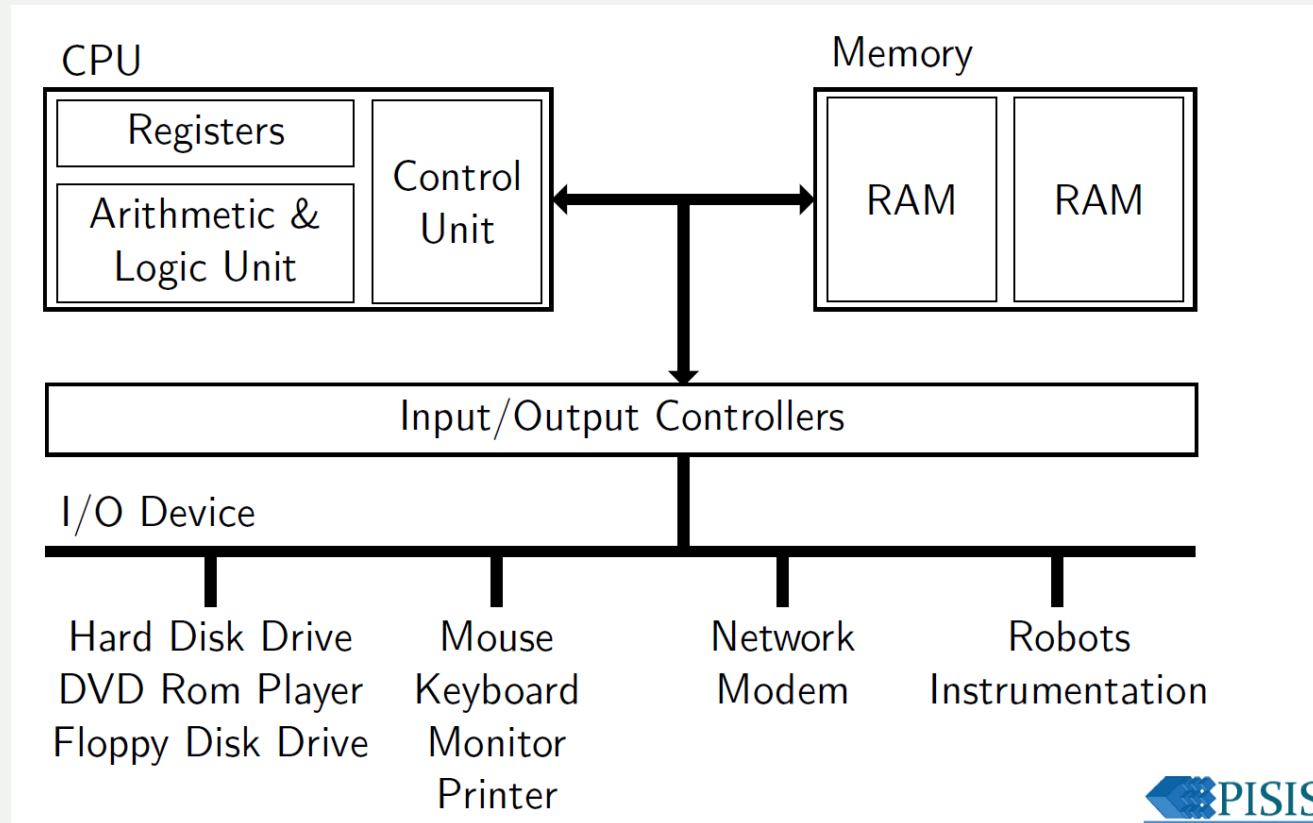
Dr. Vincent André Lionel Boyer

Ing. Marlene Pérez Franco

# TEMARIO

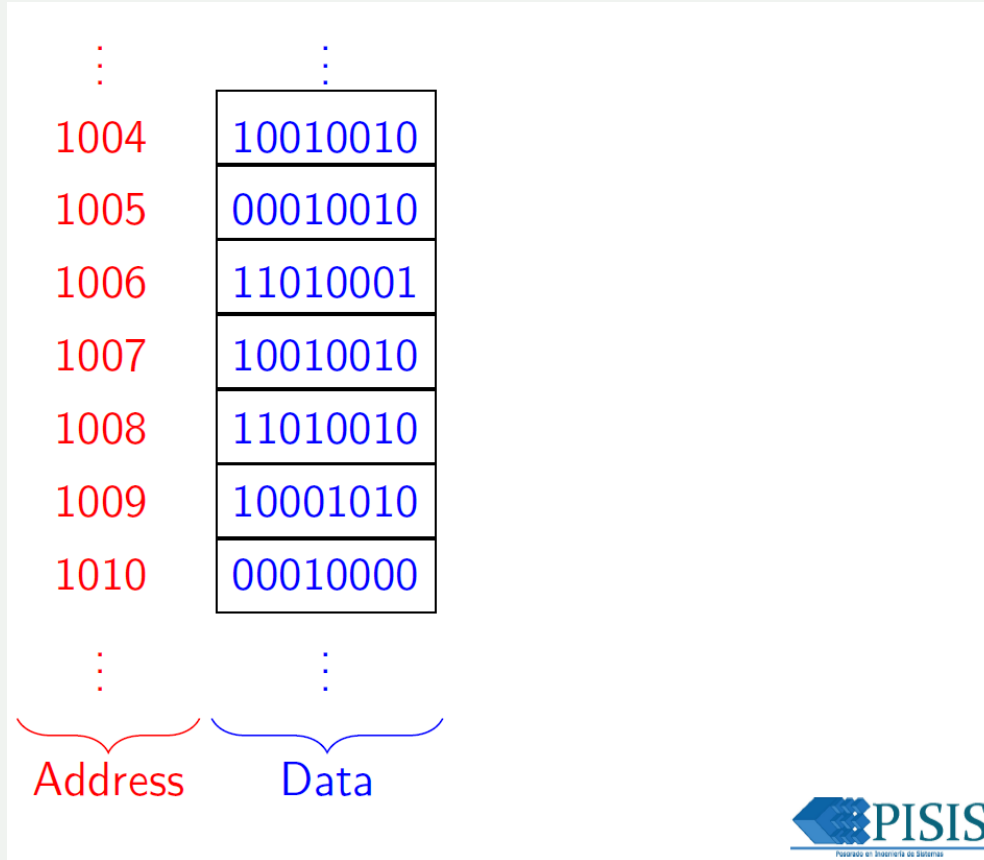
- Arquitectura de computadoras
- Estructuras de datos
- Compiladores
- Visual Studio
- “Hello world”
- Operadores de asignación
- Cin y Cout

# ARQUITECTURA DE COMPUTADORAS



# MANEJO DE MEMORIA

⋮	⋮
1004	10010010
1005	00010010
1006	11010001
1007	10010010
1008	11010010
1009	10001010
1010	00010000
⋮	⋮
Address	Data

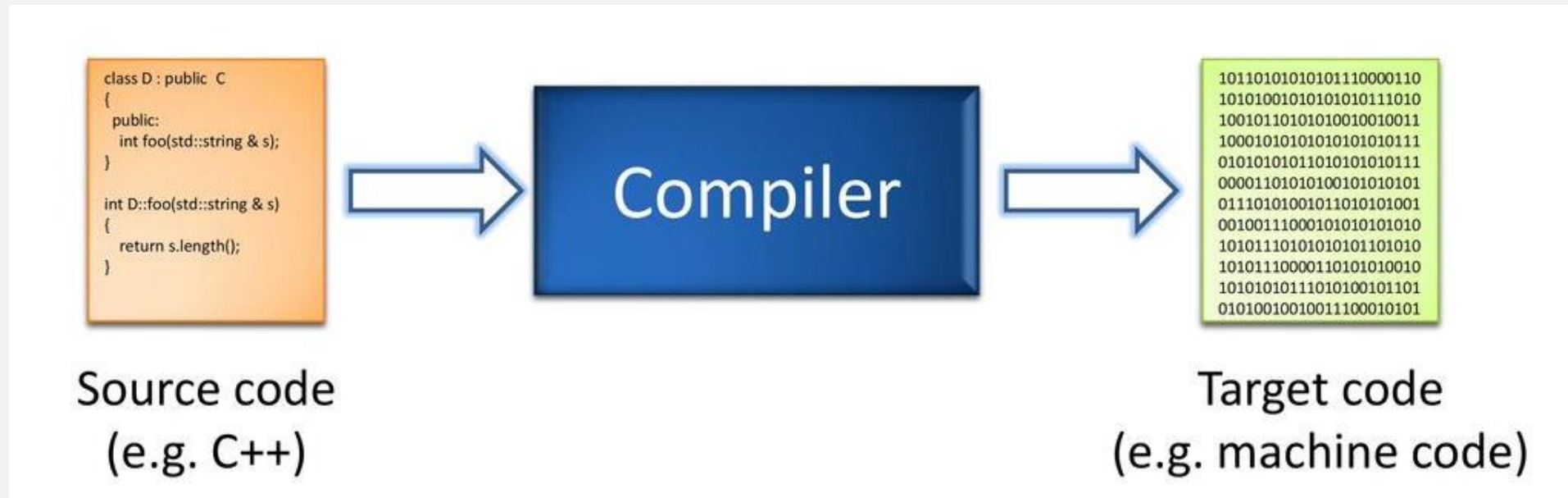


The diagram illustrates memory management with a table of addresses and data. The addresses are listed in red on the left, and the corresponding data is shown in blue on the right. The data is represented by binary strings. The table is labeled 'Address' and 'Data' at the bottom.

PISIS  
Programa de Pós-graduação em Informática



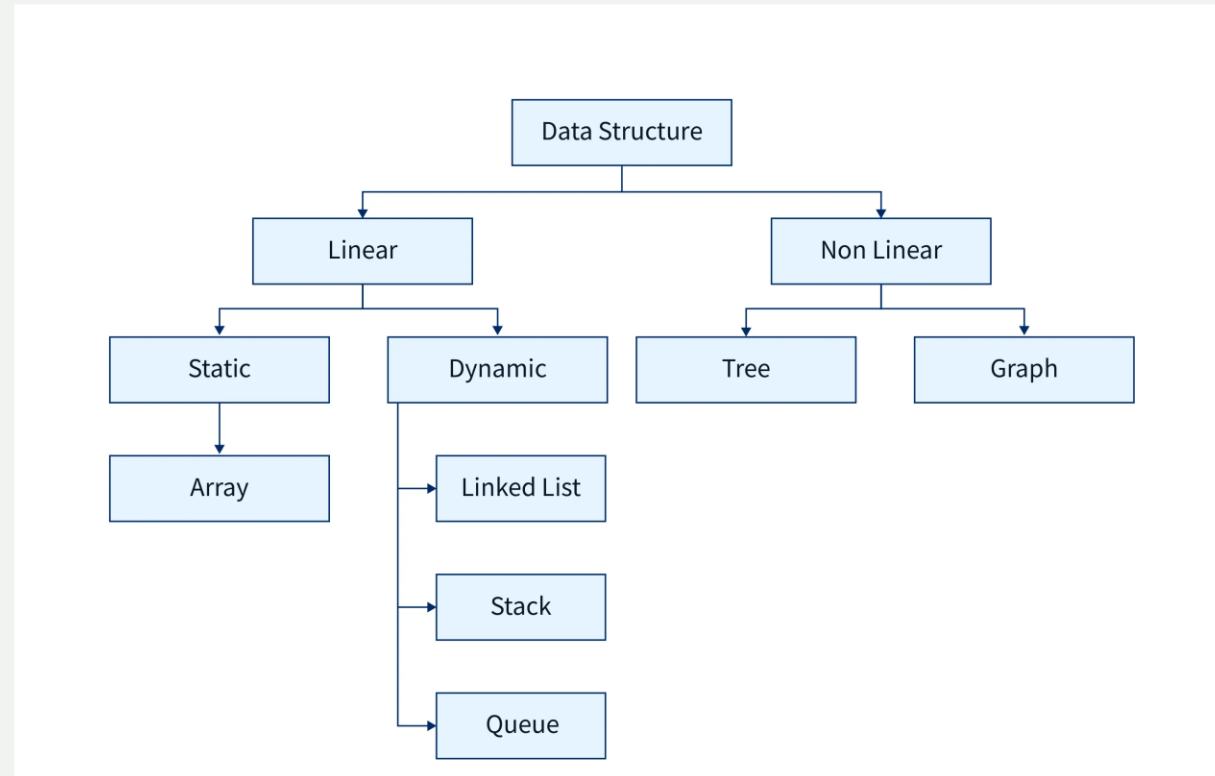
# COMPILADORES



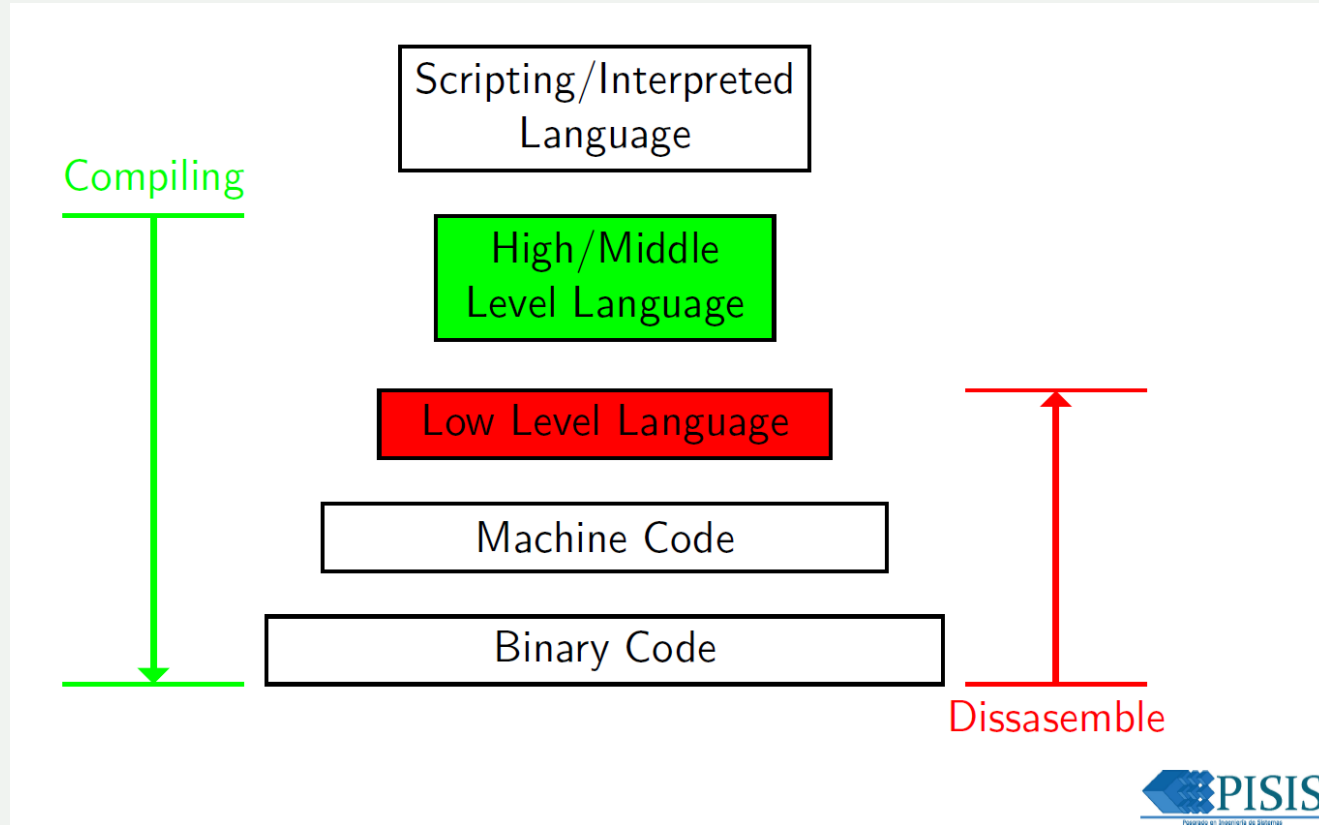
# TIPOS DE DATOS

Keyword	Variable Type	Range
char	Character	-128 to 127
int	integer	-2,147,483,648 to 2,147,483,647
short int	Short integer	-32,768 to 32,767
long int	Long integer	-9,223,372,036,854,775,808 to 9,223,372,036,854,775,807
unsigned char	Unsigned character	0 to 255
unsigned int	Unsigned integer	0 to 4,294,967,295
unsigned short	Unsigned short integer	0 to 65,535
unsigned long	Unsigned long integer	0 to 18,446,744,073,709,551,615
float	Single-precision floating point	$\pm 3.4e \pm 38$ (~7 digits)
double	Double-precision floating point	$\pm 1.7e \pm 308$ (~15 digits)

# ESTRUCTURAS DE DATOS

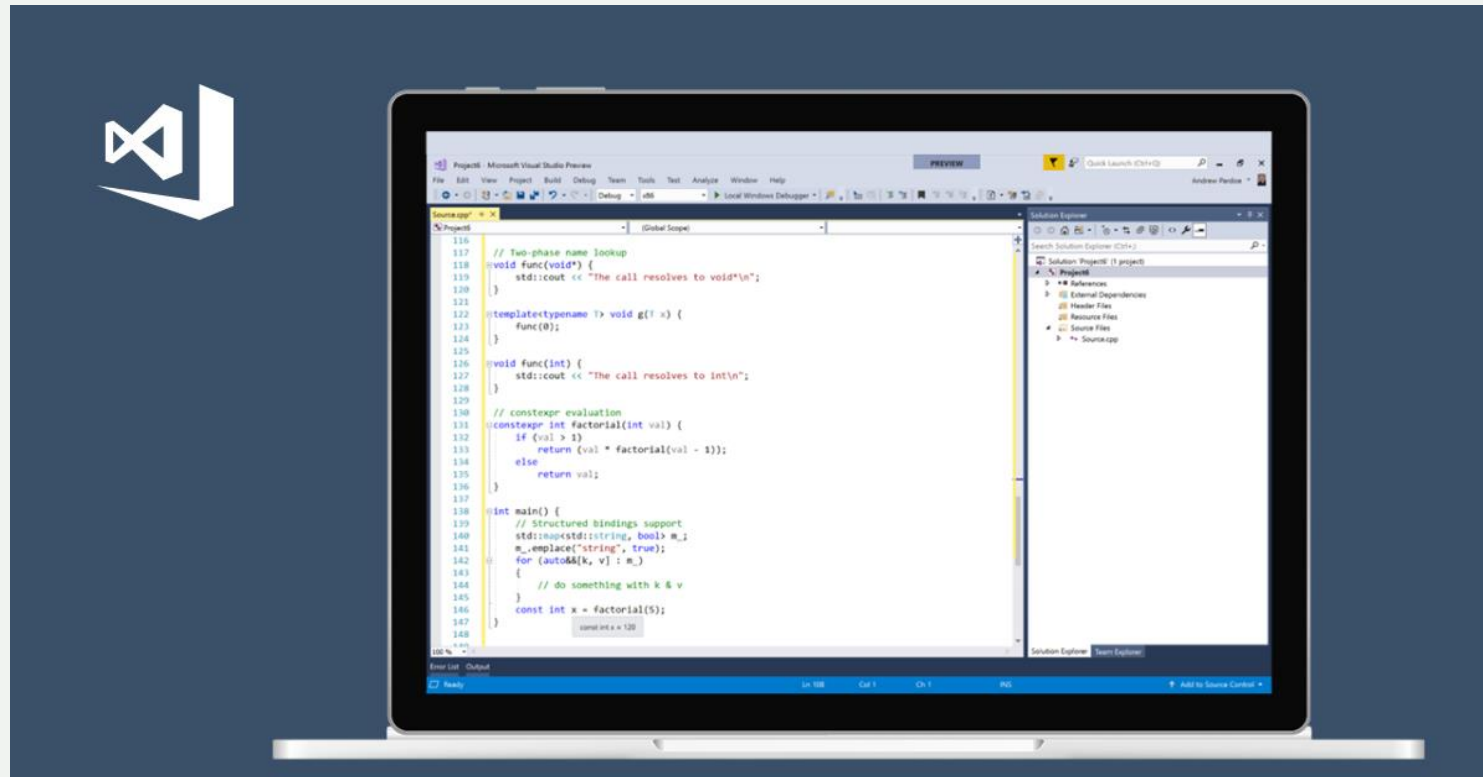


# FLUJO DE COMPILACIÓN





# ➤ VISUAL STUDIO



# “HELLO WORLD”

```
#include <iostream>
using namespace std;

int main(void){
// prints !!!Hello World!!!
    cout << "!!!Hello_World!!!" << endl;
    return 0;
}
```

## ➤ OPERADORES DE ASIGNACIÓN

=	Asignación
+=	Suma y asignación
-=	Resta y asignación
*=	Multiplicación y asignación
/=	División y asignación
%=	Módulo y asignación

# CIN Y COUT

```
#include <iostream>
using namespace std;

int main()
{
    //variable declaration
    int room_width = 0, room_length = 0, room_area = 0;

    //display a message to terminal using cout
    cout << "Enter the width of the room: " << endl;
    cin >> room_width; //get an input from keyboard using cin

    cout << "Enter the length of the room: " << endl;
    cin >> room_length;
    //calculate the area of a room
    room_area = room_width*room_length;
    //display the area to the terminal
    cout << "The area of the room is " << room_area << " square feet." << endl;
    return 0;
}
```

The background of the slide is a repeating pattern of speech bubbles in various colors (red, yellow, purple, grey, and blue) on a teal background. Each speech bubble contains a large, dark blue question mark. A white rectangular frame is superimposed on the left side of the slide, enclosing the text.

## DUDAS Y COMENTARIOS