

# *Introdução ao Processamento de Dados*

**Francisco Sant'Anna**

**francisco@ime.uerj.br**

**<http://github.com/fsantanna-uerj/IPD>**

# Processamento de Dados



# “Oi Mundo!”

```
print("Oi Mundo!")
```

```
print("Escolha um numero:")  
n = input()  
print("Voce escolheu", n)
```

```
print("Escolha entre 1-9:")  
n = int(input())  
if n == 5:  
    print("Voce acertou!")  
else:  
    print("Voce errou!")
```

Palavras em negrito?

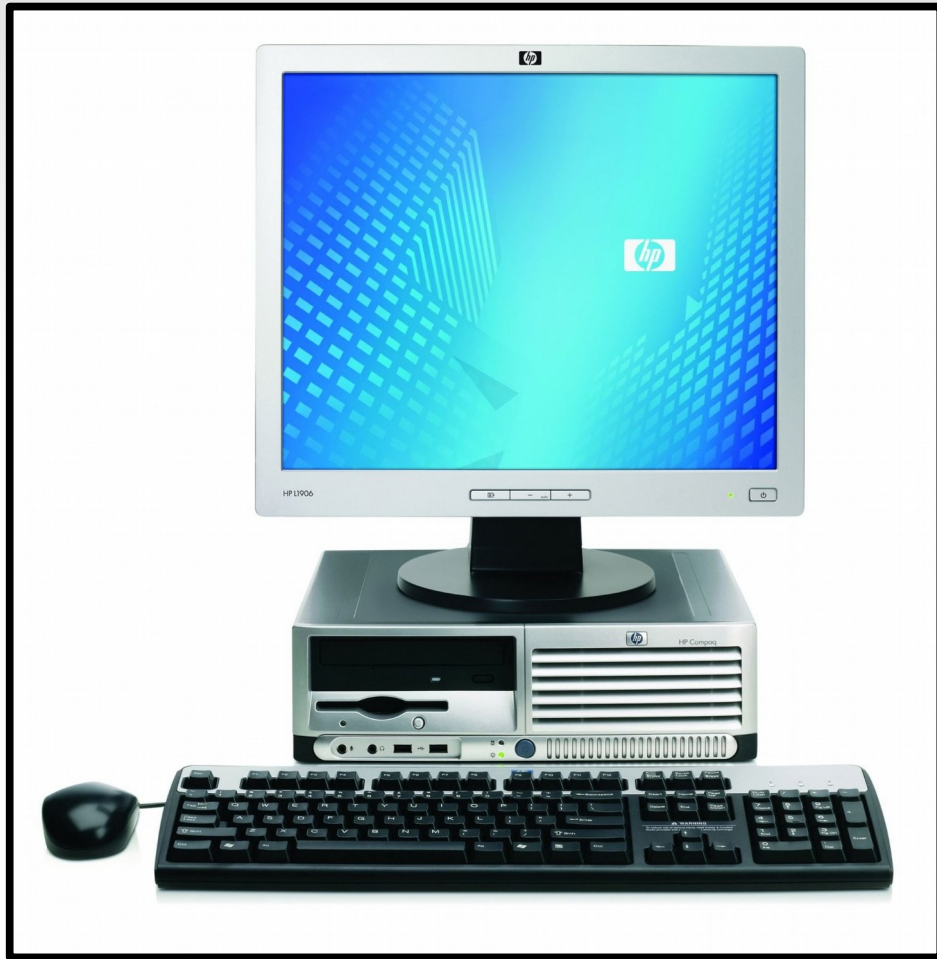
Indentação

Variável

# “Oi Mundo!”

```
print("Escolha um numero:")  
n = int(input())  
soma = 0  
while n > 0:  
    soma = (soma + n)  
    n = (n - 1)  
print("somou", soma)
```

# Computador???



# Dispositivos de Entrada e Saída (I/O)

## PERIFÉRICOS DO COMPUTADOR

### 1 - DE ENTRADA (INPUT):



TECLADO



Mouse



Joystick



Webcam



microfone



Scanner



Mesa Digitalizadora

### 2 – DE SAÍDA (OUTPUT):

MONITOR

CRT



Cristal Líquido



LCD



Projektor Multimídia



Impressora



Caixas de som

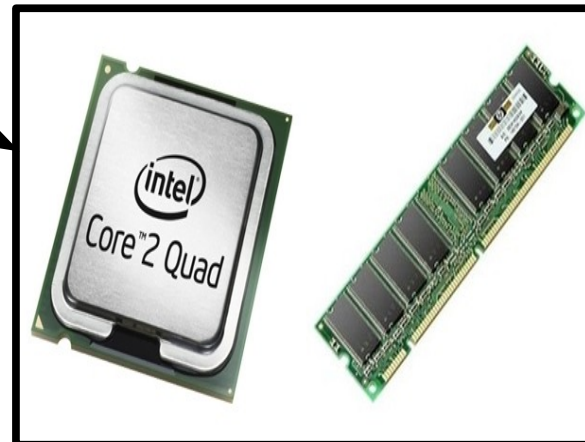
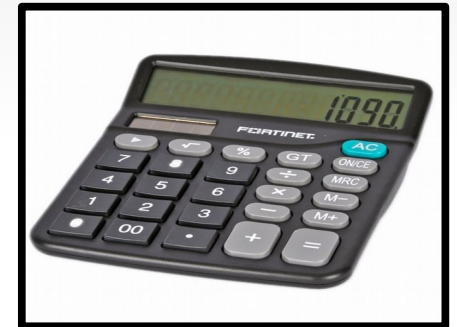


# Dispositivos de Entrada e Saída (I/O)





# Computador???





# Computador é Programável

## Hardware + Software

# Hardware vs Software

The main difference between hardware and software are as follows:

## Hardware

1. Physical parts of the computer are called hardware.
2. You can touch, see and feel hardware.
3. Hardware is constructed using physical materials or components.



**Software é o que você xinga, hardware o que você chuta**

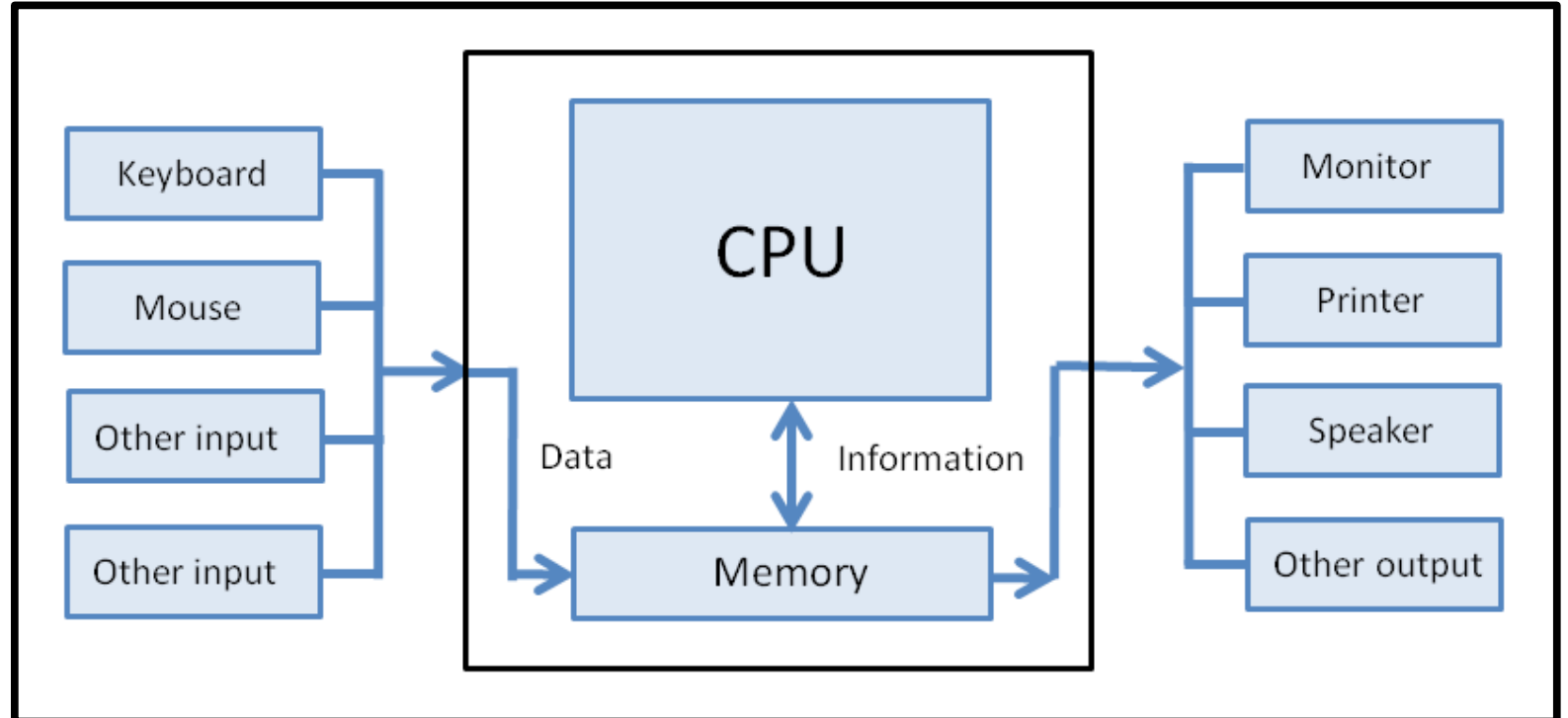
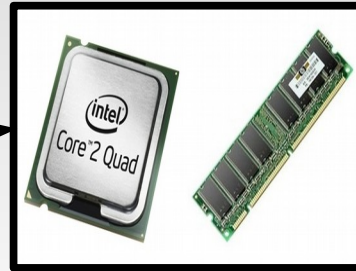
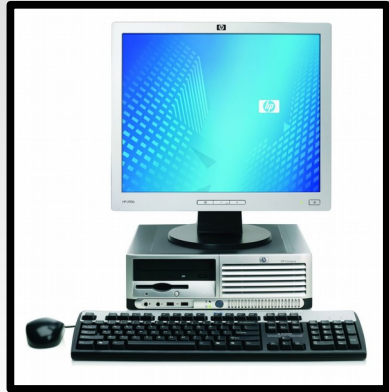
- 4.
- 5.
- 6.
7. Hardware cannot be transferred from one place to another electronically through network.
8. User cannot make new duplicate copies of the hardware.

## Software

1. A set of instructions given to the computer is called software.
2. You cannot touch and feel software.
3. Software is developed by writing instructions in programming language.
4. The operations of computer are controlled through software.
5. If software is damaged or corrupted, its backup copy can be reinstalled.
6. Software is affected by computer viruses.
7. Software can be transferred from one place to another electronically through network.
8. User can make many new duplicate copies of the software.



# Computador!



# “Oi Mundo!”

```
n = int(input("Escolha um numero: "))
soma = 0
while n > 0:
    soma = (soma + n)
    n = (n - 1)
print("somou", soma)
```

Escrita

Leitura

*variável <- expressão*

Atribuição: *destino <- origem*

*Avalie/execute a expressão de origem, e atribua o resultado ao destino.*

*expressão -> variável*