

# Lógica de Programação

#### Conteúdo:

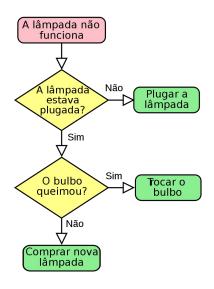
• Expressões condicionais



- Estrutura de desvio de fluxo
  - o Executa diferentes passos, dependendo da condição
- Podem ser representados por fluxogramas



# **Expressões Condicionais (Fluxograma)**



Fonte:

https://pt.wikipedia.org/wiki/Fluxograma



- Avalia expressões booleanas
- Fluxos limitados por blocos
- Podem ser aninhadas
- Podem ser encadeadas



```
if (booleanCondition && anotherBoolean) {
    // If both are true, this will be executed
}
```

Fonte: https://gist.github.com/tiagoamaro/4232f73c8bc55a92cbde9cclc4bd30c9



```
if (condition) {
   if (anotherCondition) {
     // This will only be executed the first block
   }
}
```

Fonte: https://gist.github.com/tiagoamaro/4232f73c8bc55a92cbde9cclc4bd30c9



```
if (condition) {
   // This will execute if condition is true
} else {
   // Otherwise, this will be executed instead
}
```

Fonte: https://gist.github.com/tiagoamaro/4232f73c8bc55a92cbde9cclc4bd30c9



```
if (condition) {
   // This will execute if condition is true
} else if (anotherCondition) {
   // This will only be executed if condition is false
   // and another condition is true
}
```

Fonte: https://gist.github.com/tiagoamaro/4232f73c8bc55a92cbde9cclc4bd30c9



Exemplo prático: lâmpada precisa ser trocada?



```
if (lampPlugged) {
    // Check if bulb has burned
} else {
    // Plug the lamp
}
```

Fonte: <a href="https://gist.github.com/tiagoamaro/4232f73c8bc55a92cbde9cclc4bd30c9">https://gist.github.com/tiagoamaro/4232f73c8bc55a92cbde9cclc4bd30c9</a>





```
if (lampPlugged) {
   if (burnedBulb) {
      // Change the bulb
   } else {
      // Change the lamp
   }
} else {
   // Plug the lamp
}
```

Fonte: <a href="https://gist.github.com/tiagoamaro/4232f73c8bc55a92cbde9cclc4bd30c9">https://gist.github.com/tiagoamaro/4232f73c8bc55a92cbde9cclc4bd30c9</a>





```
let lampPlugged = true
let burnedBulb = true

if (lampPlugged) {
   if (burnedBulb) {
      console.log("Need to change de bulb")
   } else {
      console.log("Change the lamp")
   }
} else {
   console.log("Plug the lamp")
}
```

Fonte: https://gist.github.com/tiagoamaro/4232f73c8bc55a92cbde9cclc4bd30c9



• Exemplos no terminal



