



# JavaScript

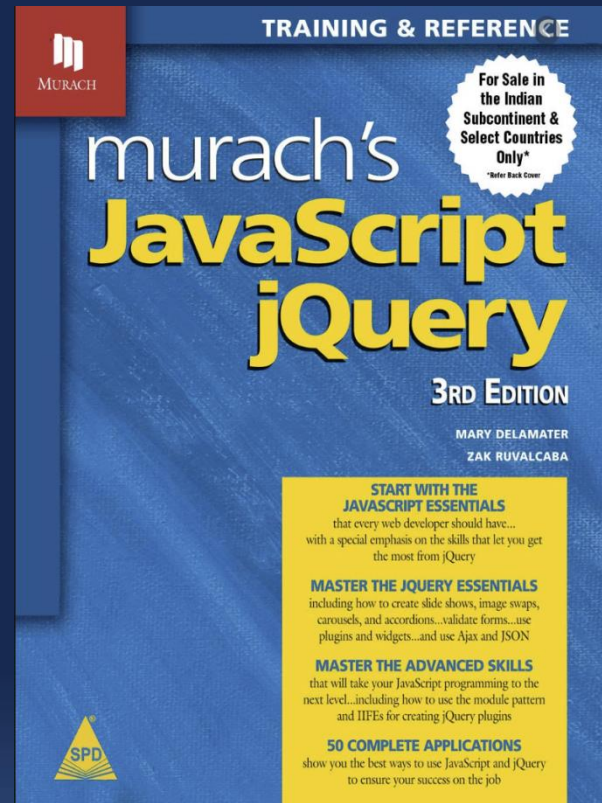
## Unidade 3 – Controle de Fluxo



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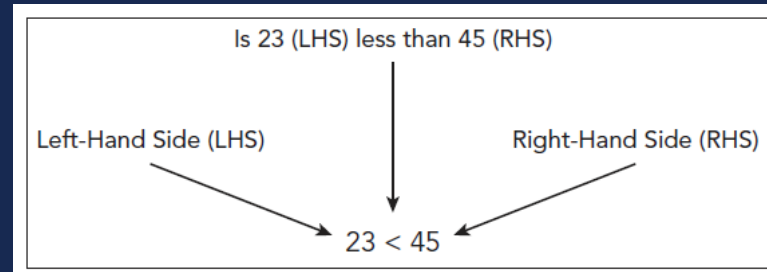


# Bibliografia





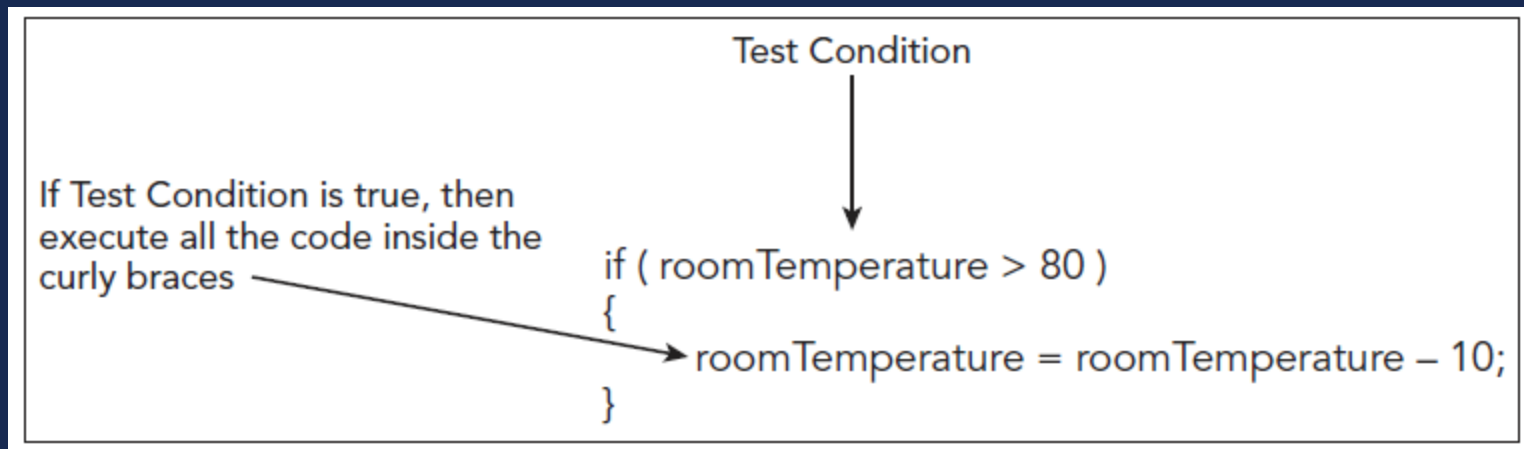
# Operadores de Comparação



OPERATOR SYMBOL	PURPOSE
==	Tests if LHS is equal to RHS
<	Tests if LHS is less than RHS
>	Tests if LHS is greater than RHS
<=	Tests if LHS is less than or equal to RHS
>=	Tests if LHS is greater than or equal to RHS
!=	Tests if LHS is not equal to RHS



# Comando if





# Exemplo 1

Unidade\_3\_01.html > ...

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Unidade 3, Exemplo 1 - Controle de Fluxo</title>
  <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
</head>
<body>
  <script>

    var degFahren = parseInt(prompt("Entre com a temperatura em Fahrenheit:", 32), 10);
    var degCent = 5/9 * (degFahren - 32);

    document.write(degFahren + "\xB0 Fahrenheit é " + degCent + " " +
      "\xB0 Centígrados! <br />");

    if (degCent < 0)
      document.write("Significa que está abaixo do ponto de congelamento da água!");

    if (degCent == 100)
      document.write("Significa que é o ponto de ebulição da água!");

  </script>
</body>
</html>
```



# Exemplo 1

Unidade\_3\_01.html &gt; ...

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Unidade 3, Exemplo 1 - Controle de Fluxo</title>
  <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
</head>
<body>
  <script>

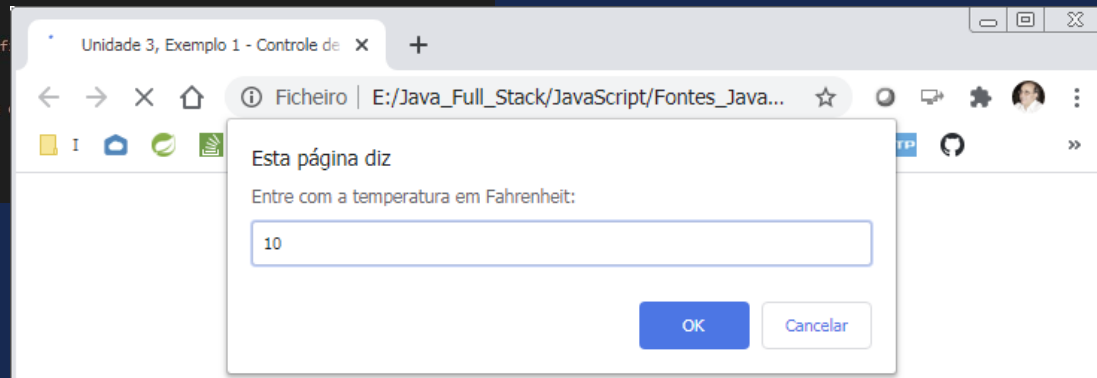
    var degFahren = parseInt(prompt("Entre com a temperatura em Fahrenheit:", 32), 10);
    var degCent = 5/9 * (degFahren - 32);

    document.write(degFahren + "\xB0 Fahrenheit é " + degCent + " " +
      "\xB0 Centigrados! <br />");

    if (degCent < 0)
      document.write("Significa que est\u00e1 abaixo do ponto de congelamento da \u00e1gua!");

    if (degCent == 100)
      document.write("Significa que est\u00e1 no ponto de ebuli\u00e7\u00e3o da \u00e1gua!");

  </script>
</body>
</html>
```





# Operadores Lógicos

OPERATOR	SYMBOL
AND	&&
OR	
NOT	!





# Exemplo 2

Unidade\_3\_02.html > ...

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Unidade 3, Exemplo 2 - Controle de Fluxo</title>
  <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
</head>
<body>
  <script>
    var myAge = parseInt( prompt("Entre com a sua idade", 30), 10 );

    if (myAge > 80 )
      document.write("Minha idade está acima de 80<br />");
    else {
      if (myAge < 10)
        document.write("Minha idade está abaixo de 10<br />");
      else
        document.write("Minha idade está entre 10 (inclusive) e 80 (inclusive)" );
    }
  </script>
</body>
</html>
```





# Exemplo 2

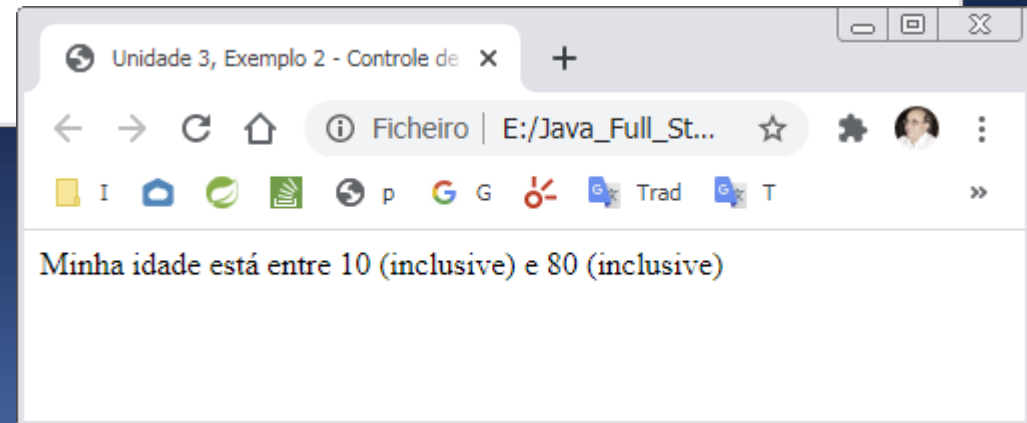
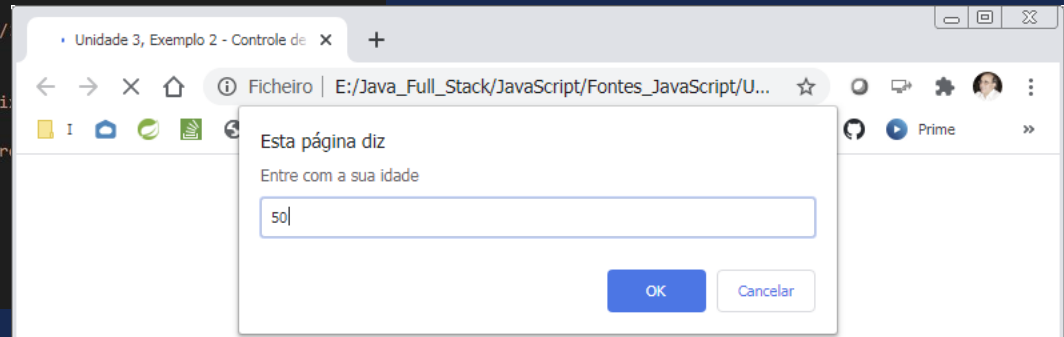
Unidade\_3\_02.html &gt; ...

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Unidade 3, Exemplo 2 - Controle de Fluxo</title>
  <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
</head>
<body>
  <script>

    var myAge = parseInt( prompt("Entre com a sua idade", 30), 10 );

    if (myAge > 80 )
      document.write("Minha idade está acima de 80<br />");
    else {
      if (myAge < 10)
        document.write("Minha idade está abaixo de 10<br />");
      else
        document.write("Minha idade está entre 10 e 80<br />");
    }

  </script>
</body>
</html>
```





# Comando switch

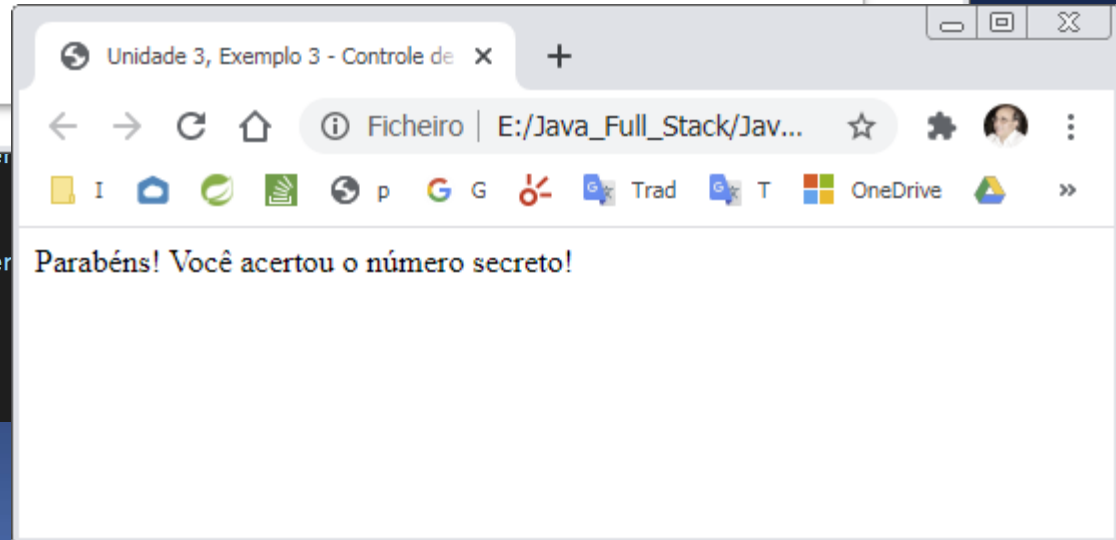
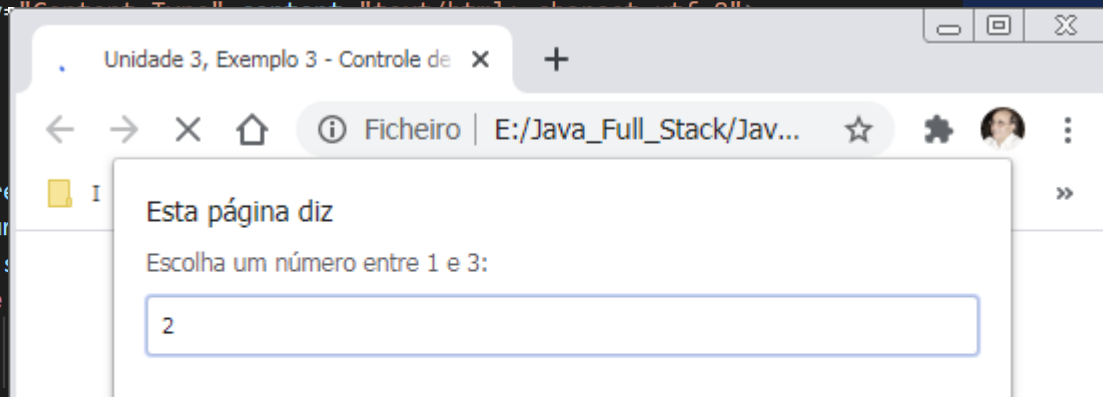
Unidade\_3\_03.html > ...

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Unidade 3, Exemplo 3 - Controle de Fluxo</title>
  <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
</head>
<body>
  <script>
    var secretNumber = prompt("Escolha um número entre 1 e 3:");
    secretNumber = parseInt(secretNumber);
    switch (secretNumber) {
      case 1:
        document.write("Muito baixo!");
        break;
      case 2:
        document.write("Parabéns! Você acertou o número secreto!");
        break;
      case 3:
        document.write("Muito alto!");
        break;
      default:
        document.write("Você digitou um número fora do intervalo!");
    }
  </script>
</body>
</html>
```

# Comando switch

Unidade\_3\_03.html > ...

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Unidade 3, Exemplo 3 - Controle de Fluxo</title>
  <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
</head>
<body>
  <script>
    var secreto = 123456789;
    secretNumero = secreto;
    switch (secretNumero) {
      case 123456789:
        document.write("Parabéns! Você acertou o número secreto!");
        break;
      default:
        document.write("Você errou o número secreto!");
    }
  </script>
</body>
</html>
```





# Loops com for

Unidade\_3\_04.html > ...

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Unidade 3, Exemplo 4 - Loops com for</title>
  <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
</head>
<body>
  <script>

    var degFahren = [50, 32, -10.8];
    var degCent = [];
    var loopCounter;

    for (loopCounter = 0; loopCounter <= 2; loopCounter++)
      degCent[loopCounter] = 5/9 * (degFahren[loopCounter] - 32);

    for (loopCounter = 2; loopCounter >= 0; loopCounter--) {

      document.write(degFahren[loopCounter] + " F ");
      document.write(" corresponde a " + degCent[loopCounter] + " C <br />");

    }

  </script>
</body>
</html>
```



# Loops com for

Unidade\_3\_04.html &gt; ...

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Unidade 3, Exemplo 4 - Loops com for</title>
  <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
</head>
<body>
  <script>

    var degFahren = [50, 32, -10.8];
    var degCent = [];
    var loopCounter;

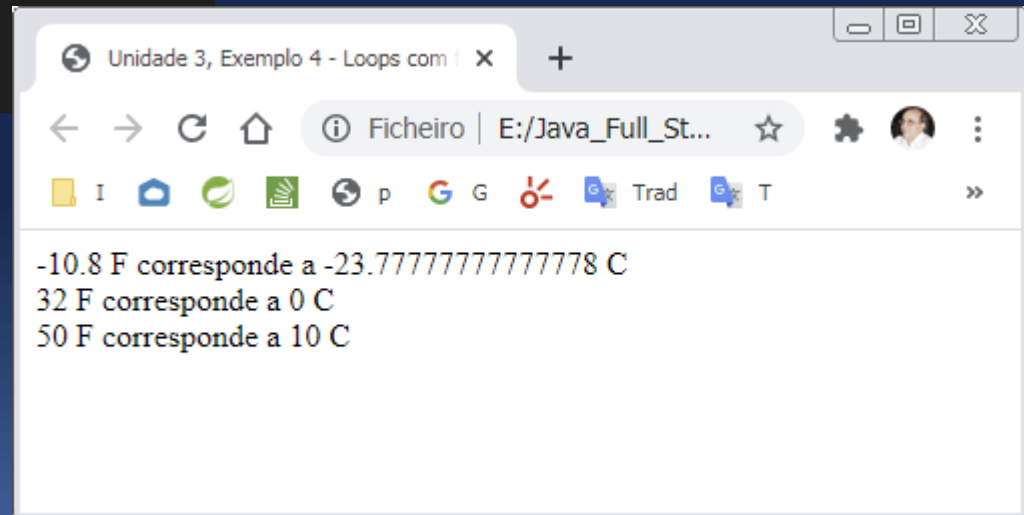
    for (loopCounter = 0; loopCounter <= 2; loopCounter++)
      degCent[loopCounter] = 5/9 * (degFahren[loopCounter] - 32);

    for (loopCounter = 2; loopCounter >= 0; loopCounter--) {

      document.write(degFahren[loopCounter] + " F ");
      document.write(" corresponde a " + degCent[loopCounter] + " C <br />");

    }

  </script>
</body>
</html>
```





# O loop for ... in

- ✓ Permite a **varredura** de todos os elementos do array, **sem** que seja necessário saber-se de antemão quantos elementos o array contém;
- ✓ Trata-se da construção: "Para cada elemento do array execute o código..."

```
for (index in arrayName) {  
    //some code  
}
```



# O loop for ... in

Unidade\_3\_06.html > ...

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Unidade 3, Exemplo 6 - loop for ... </title>
  <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
</head>
<body>
  <script>

    var tab = [];
    tab[0] = 2;

    for (var i=1; i<5; i++)
      tab[i] = tab[i-1]+2;

    for (var j in tab)
      document.write(tab[j] + "<br>");

  </script>
</body>
</html>
```





# O loop for ... in

Unidade\_3\_06.html &gt; ...

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Unidade 3, Exemplo 6 - loop for ... </title>
  <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
</head>
<body>
  <script>
    var tab = [];
    tab[0] = 2;

    for (var i=1; i<5; i++)
      tab[i] = tab[i-1]+2;

    for (var j in tab)
      document.write(tab[j] + "<br>");
  </script>
</body>
</html>
```





# O loop while

Unidade\_3\_07.html &gt; ...

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Unidade 3, Exemplo 7 - Loop while </title>
  <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
</head>
<body>
  <script>

    var tab = [];
    tab[0] = 2;

    for (var i=1; i<5; i++)
      tab[i] = tab[i-1]+2;

    var j = tab.length - 1;

    while (j >= 0) {
      document.write(tab[j] + "<br>");
      j--;
    }

  </script>
</body>
</html>
```



# O loop while

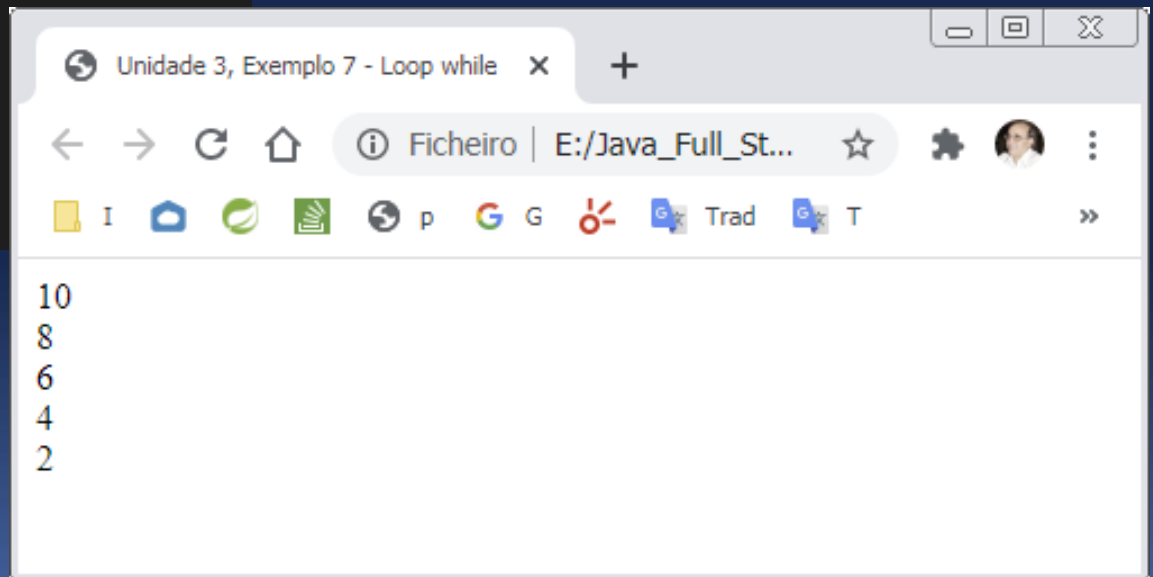
Unidade\_3\_07.html &gt; ...

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Unidade 3, Exemplo 7 - Loop while </title>
  <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
</head>
<body>
  <script>
    var tab = [];
    tab[0] = 2;

    for (var i=1; i<5; i++)
      tab[i] = tab[i-1]+2;

    var j = tab.length - 1;

    while (j >= 0) {
      document.write(tab[j] + "<br>");
      j--;
    }
  </script>
</body>
</html>
```





# O loop do while

Unidade\_3\_08.html &gt; ...

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Unidade 3, Exemplo 8 - Loop do while </title>
  <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
</head>
<body>
  <script>

    var tab = [];
    tab[0] = 2;
    var i = 1;

    do {
      tab[i] = tab[i-1]+2;
      i++;
    } while (i <= 4)

    var j = tab.length - 1;

    while (j >= 0) {
      document.write(tab[j] + "<br>");
      j--;
    }

  </script>
</body>
</html>
```



# O loop do while

Unidade\_3\_08.html &gt; ...

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Unidade 3, Exemplo 8 - Loop do while </title>
  <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
</head>
<body>
  <script>

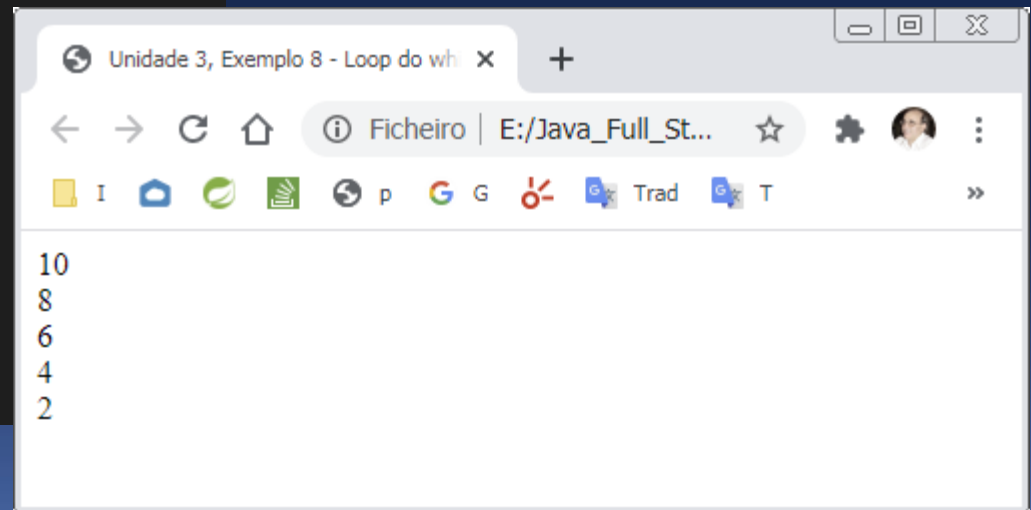
    var tab = [];
    tab[0] = 2;
    var i = 1;

    do {
      tab[i] = tab[i-1]+2;
      i++;
    } while (i <= 4)

    var j = tab.length - 1;

    while (j >= 0) {
      document.write(tab[j] + "<br>");
      j--;
    }

  </script>
</body>
</html>
```





# break

Unidade\_3\_09.html &gt; ...

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Unidade 3, Exemplo 9 - break </title>
  <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
</head>
<body>
  <script>

    var tab = [];
    tab[0] = 2;
    var i = 1;

    do {
      if( i == 10 )
        break;
      tab[i] = tab[i-1]+2;
      i++;
    } while (true)

    var j = tab.length - 1;

    while (j >= 0) {
      document.write(tab[j] + "<br>");
      j--;
    }

  </script>
</body>
</html>
```



# break

Unidade\_3\_09.html &gt; ...

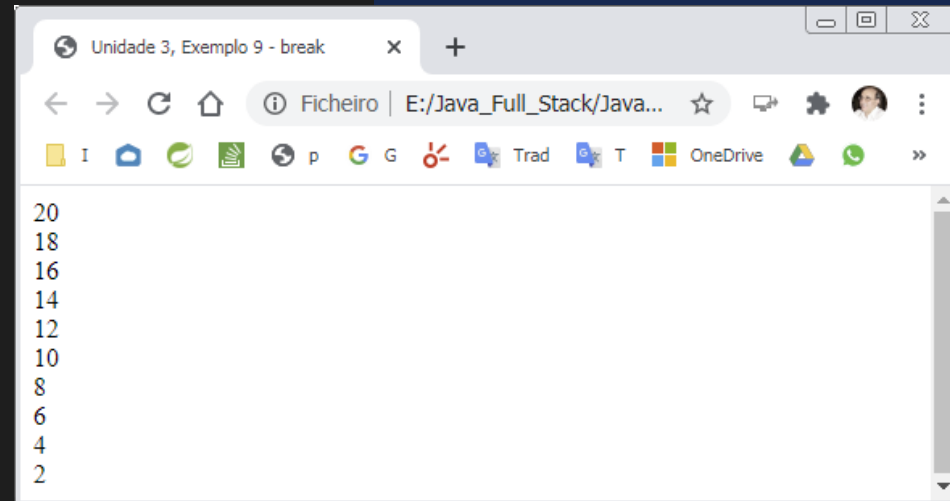
```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Unidade 3, Exemplo 9 - break </title>
  <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
</head>
<body>
  <script>
    var tab = [];
    tab[0] = 2;
    var i = 1;

    do {
      if( i == 10 )
        break;
      tab[i] = tab[i-1]+2;
      i++;
    } while (true)

    var j = tab.length - 1;

    while (j >= 0) {
      document.write(tab[j] + "<br>");
      j--;
    }

  </script>
</body>
</html>
```







# continue

Unidade\_3\_10.html &gt; ...

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Unidade 3, Exemplo 10 continue </title>
  <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
</head>
<body>
  <script>

    var tab = [];
    tab[0] = 2;
    var i = 1;

    while ( i < 10) {
      tab[i] = tab[i-1]+2;
      i++;
    }

    var j = tab.length;

    while (j > 0) {
      j--;
      if( j % 2 == 1)
        continue;
      document.write(tab[j] + "<br>");
    }

  </script>
</body>
</html>
```