* **console.log()**

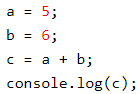
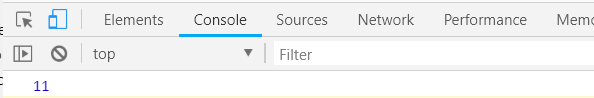
console.log() sẽ show ra giá trị của tất cả các loại dữ liệu như number, integer, array, object

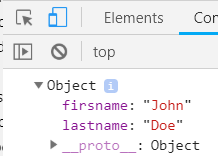
Bấm F12 trên brower để xem log

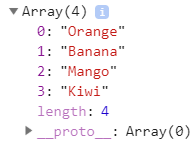


*Message có thể là String or Object*

VD:

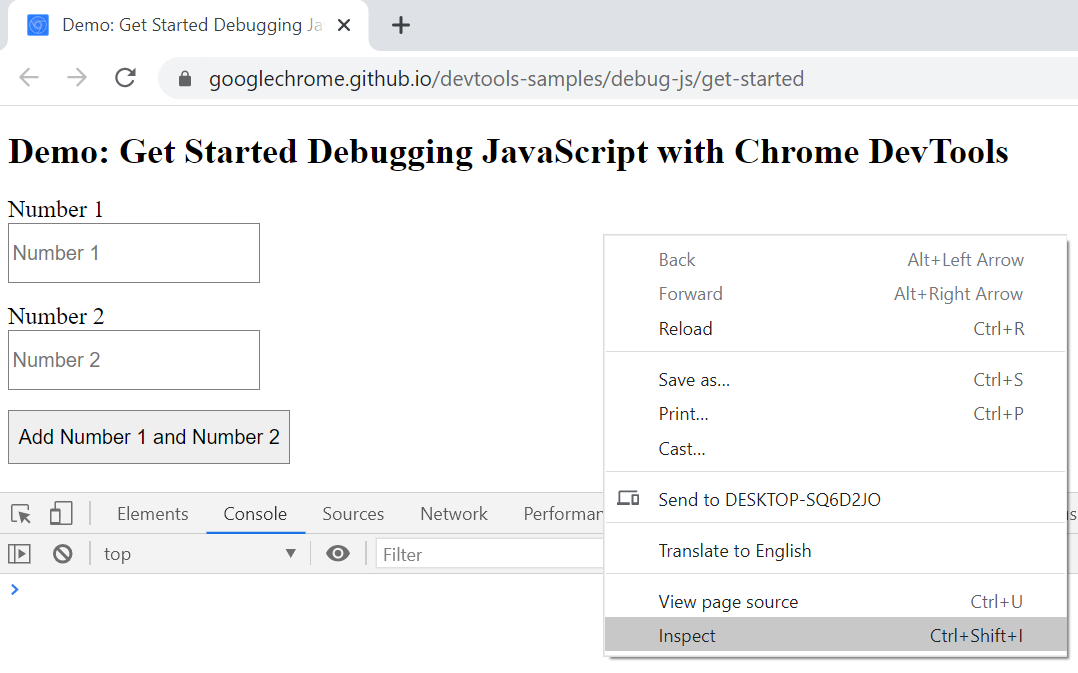
 

* **DevTools**
  + Có nhiều tools khác nhau
    - Changing CSS
    - Profiling page load performance
    - Monitoring network requests
* **Demo**

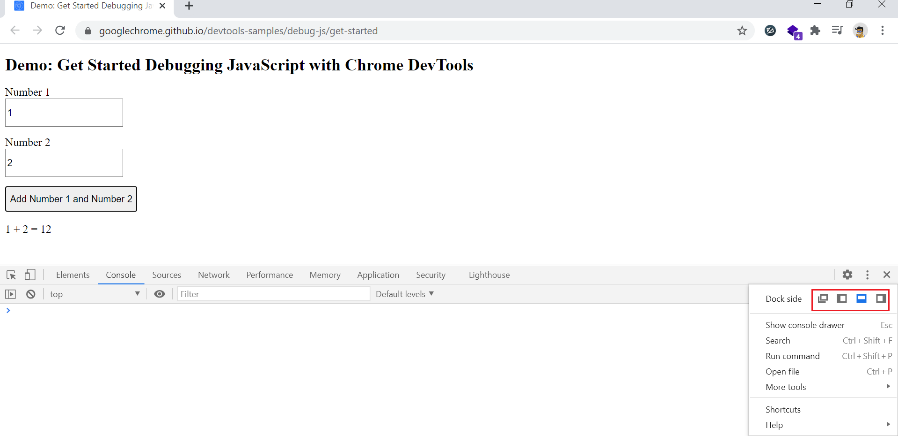
<https://googlechrome.github.io/devtools-samples/debug-js/get-started>

* **Open tools**



*Bấm F12 (hoặc click chuột phải 🡪 inspect) để open*

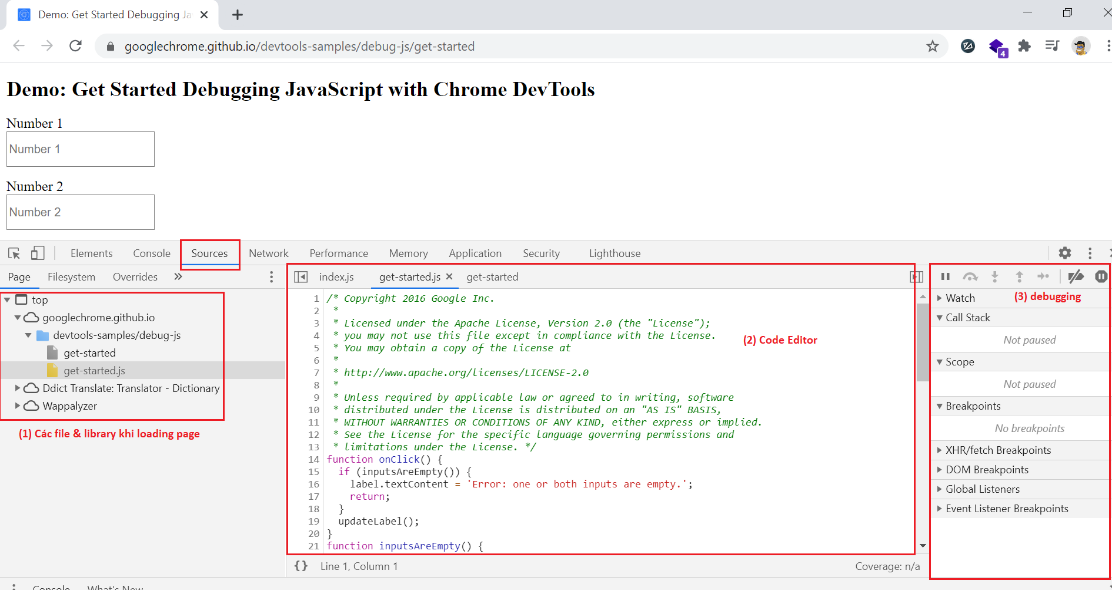
* **Chỉnh tools hiển thị theo chiều ngang hay dọc**



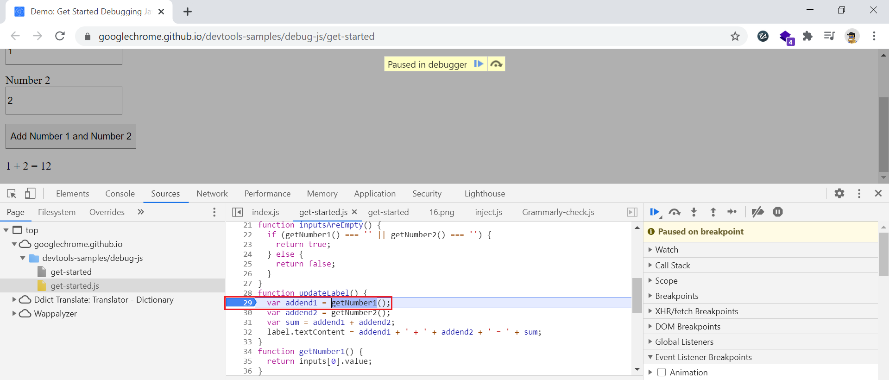
* **Source tab**

Gồm 3 phần

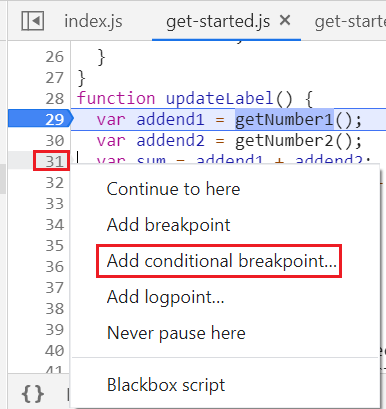
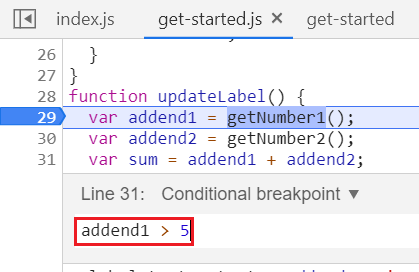
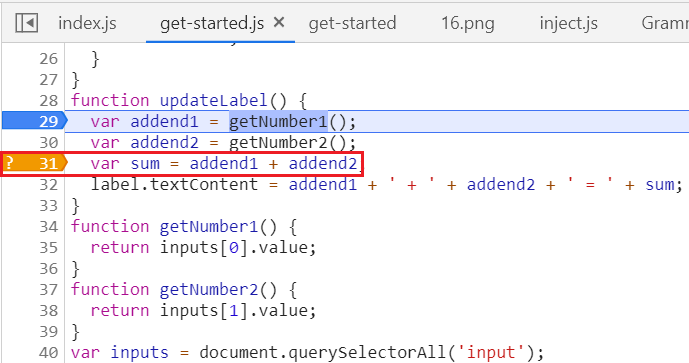
* + 1: Các file khi vào 1 page cần
  + 2: Code Editor
  + 3: Khu vực debug



* **Debugging**
  + **Breakpoint**



* + **Shortcut**
    - Step into (F11)
    - Step out (Shift + F11)
    - Step over (F10)
    - Continue to next breakpoint (F8)
  + **Conditional Breakpoint**

* + **DOM breakpoints**
    - **Subtree modifications**

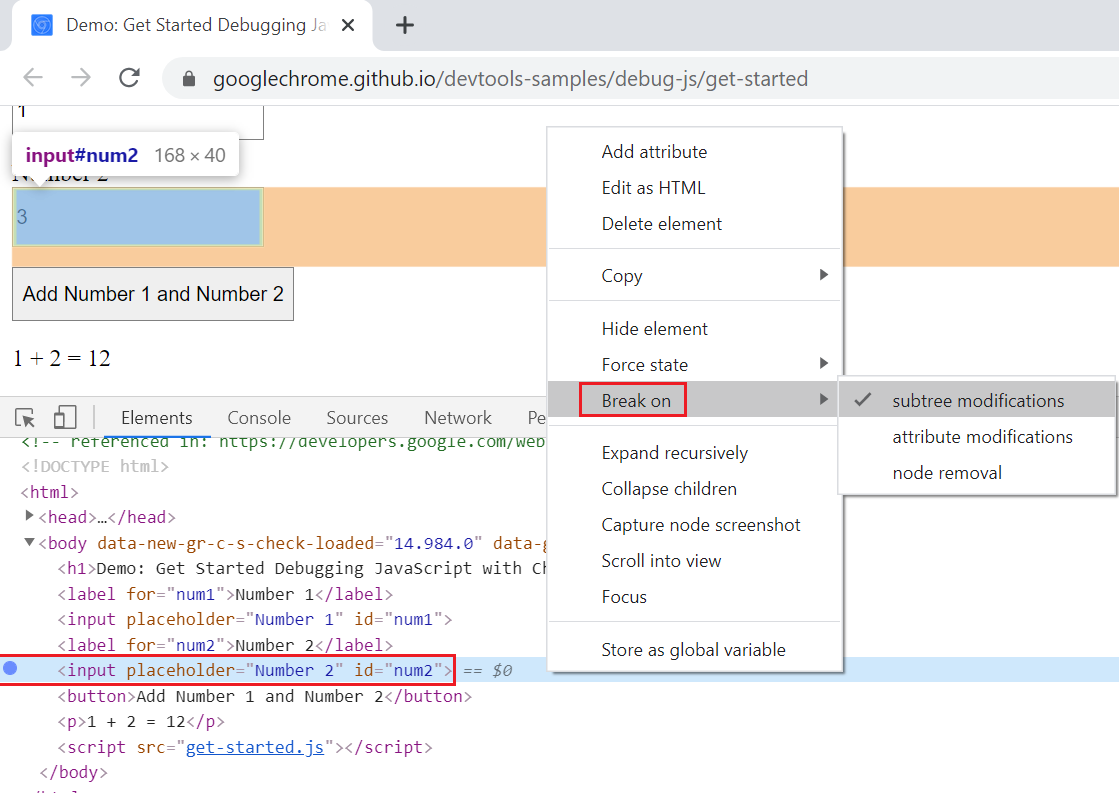
Vào breakpoint khi có 1 node con bị thay đổi content, add thêm vào hoặc remove đi

* + - **Attributes modifications**

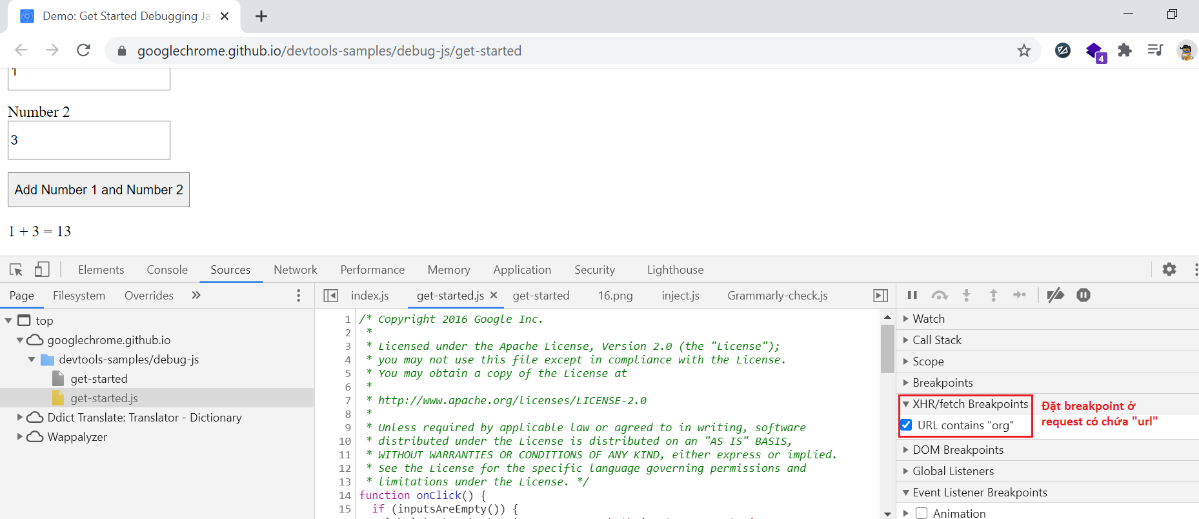
Vào breakpoint khi có 1 attribute bị thay đổi content, add thêm vào hoặc remove đi

* + - **Node Removal**

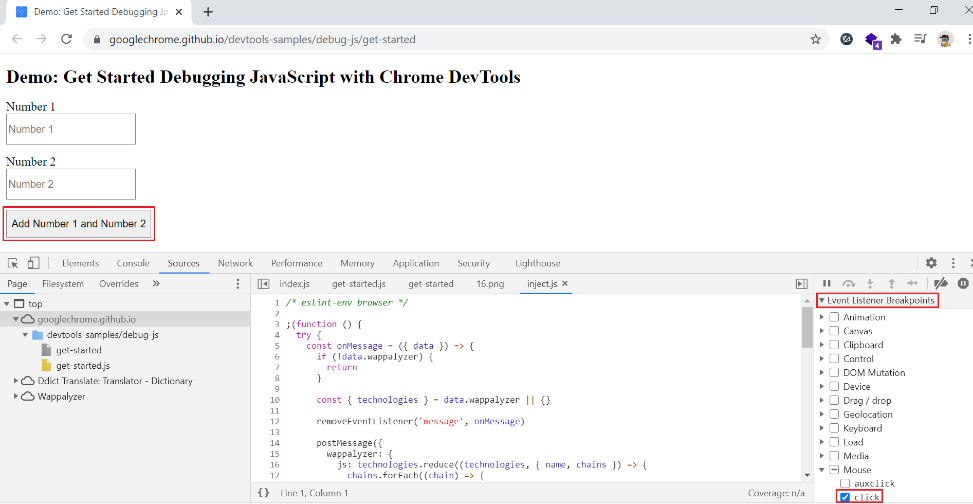
Vào breakpoint khi có node bị remove đi

****

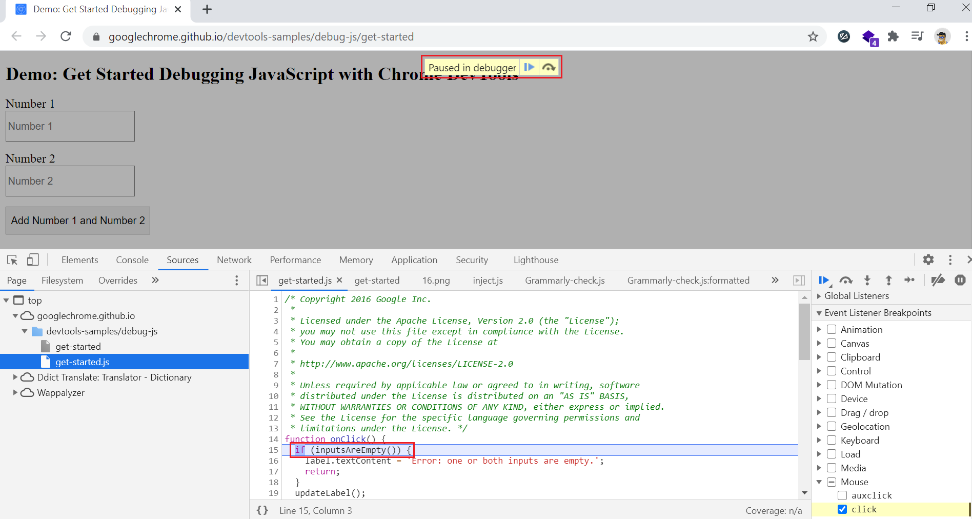
* + **XHR/Fetch breakpoints**



* + **Event Listener Breakpoints**

****

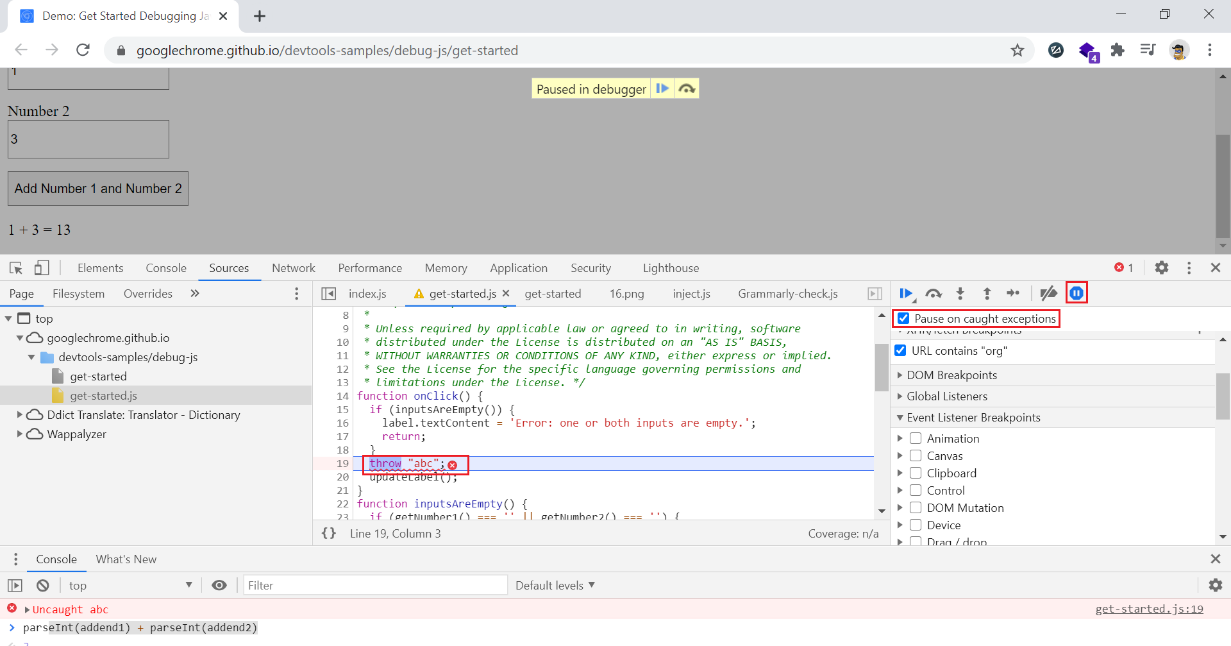
*🡺 Click vào button "Add Number 1 and Number 2"*

****

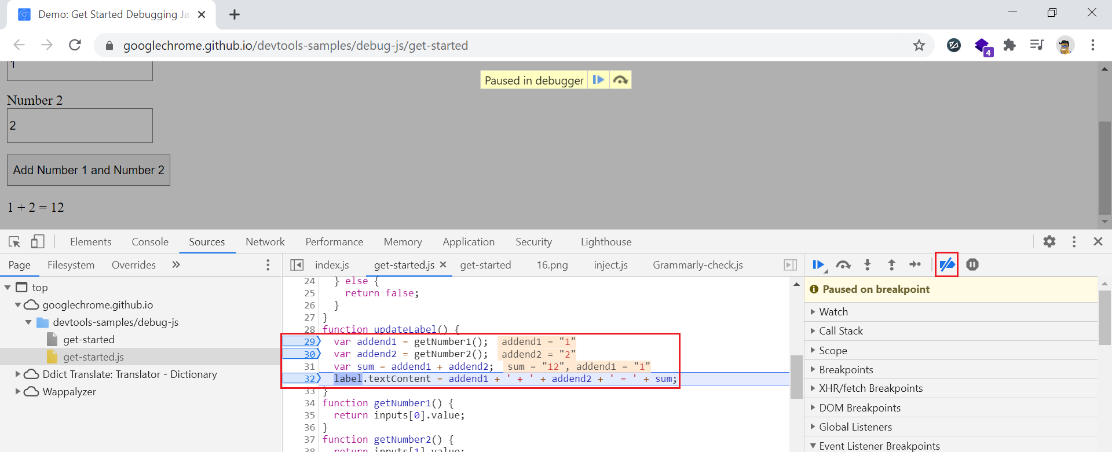
Note: Có thể khi click vào button sẽ hiện lên file khác, dòng khác (do đính kèm extension hoặc library) 🡺 click vào button  cho tới khi tới được file hoặc line mà mình mong muốn

* + **Exception breakpoint**

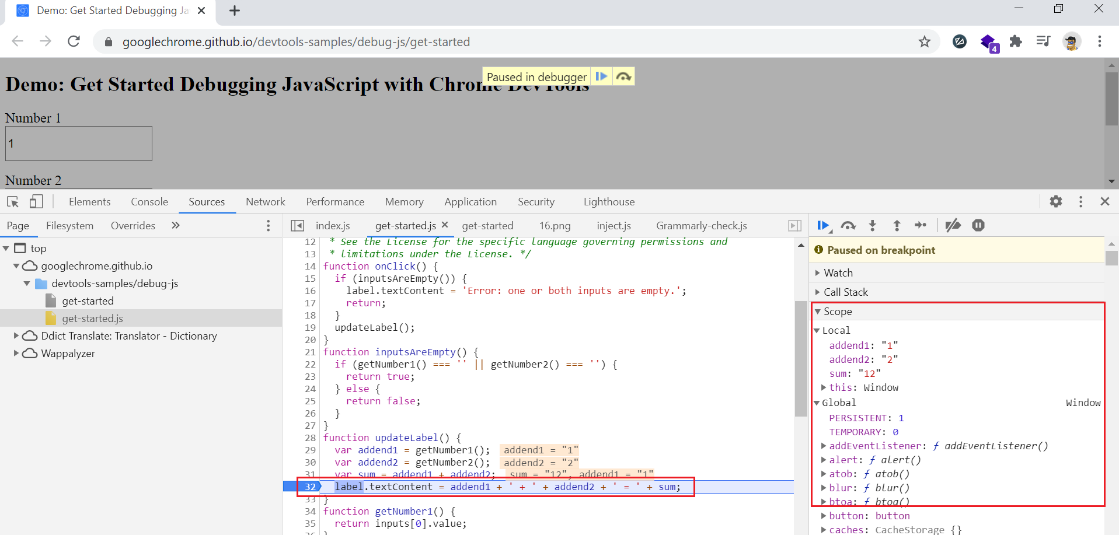
Dừng lại ở line gây error

****

* + **Disable breakpoints**

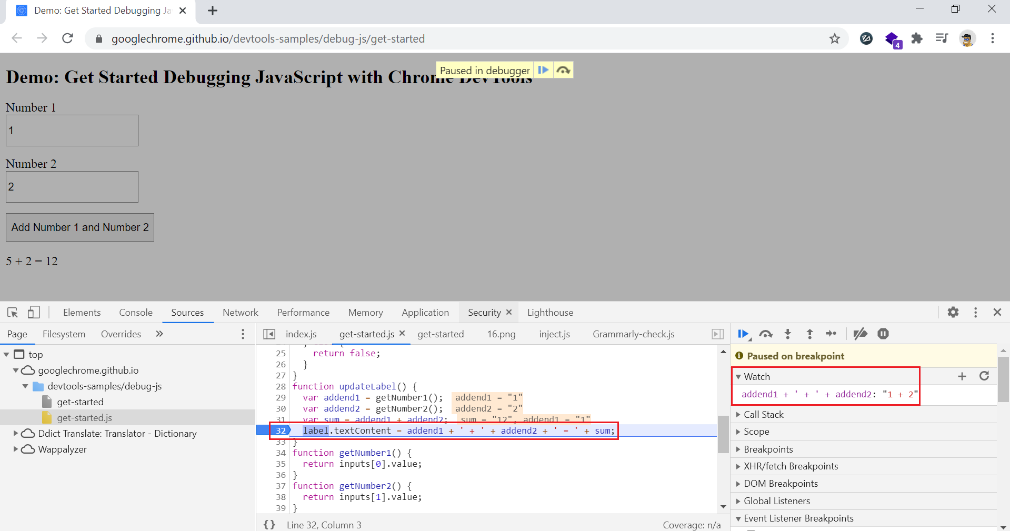


* + **Check variable value**
    - Local variable
    - Global variable



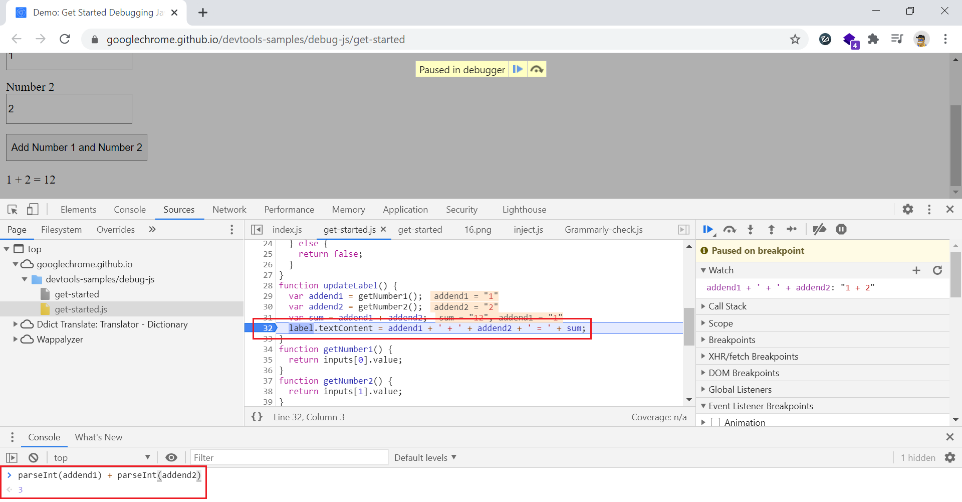
*Double-click vào variable để chỉnh value*

* + **Execute expressions**
    - **Cách 1:**



*Có thể vừa xem data vừa edit được data*

* + - **Cách 2:**



* **Reference**

<https://www.w3schools.com/js/js_debugging.asp>

<https://developers.google.com/web/tools/chrome-devtools/javascript>

<https://developers.google.com/web/tools/chrome-devtools/javascript/breakpoints>