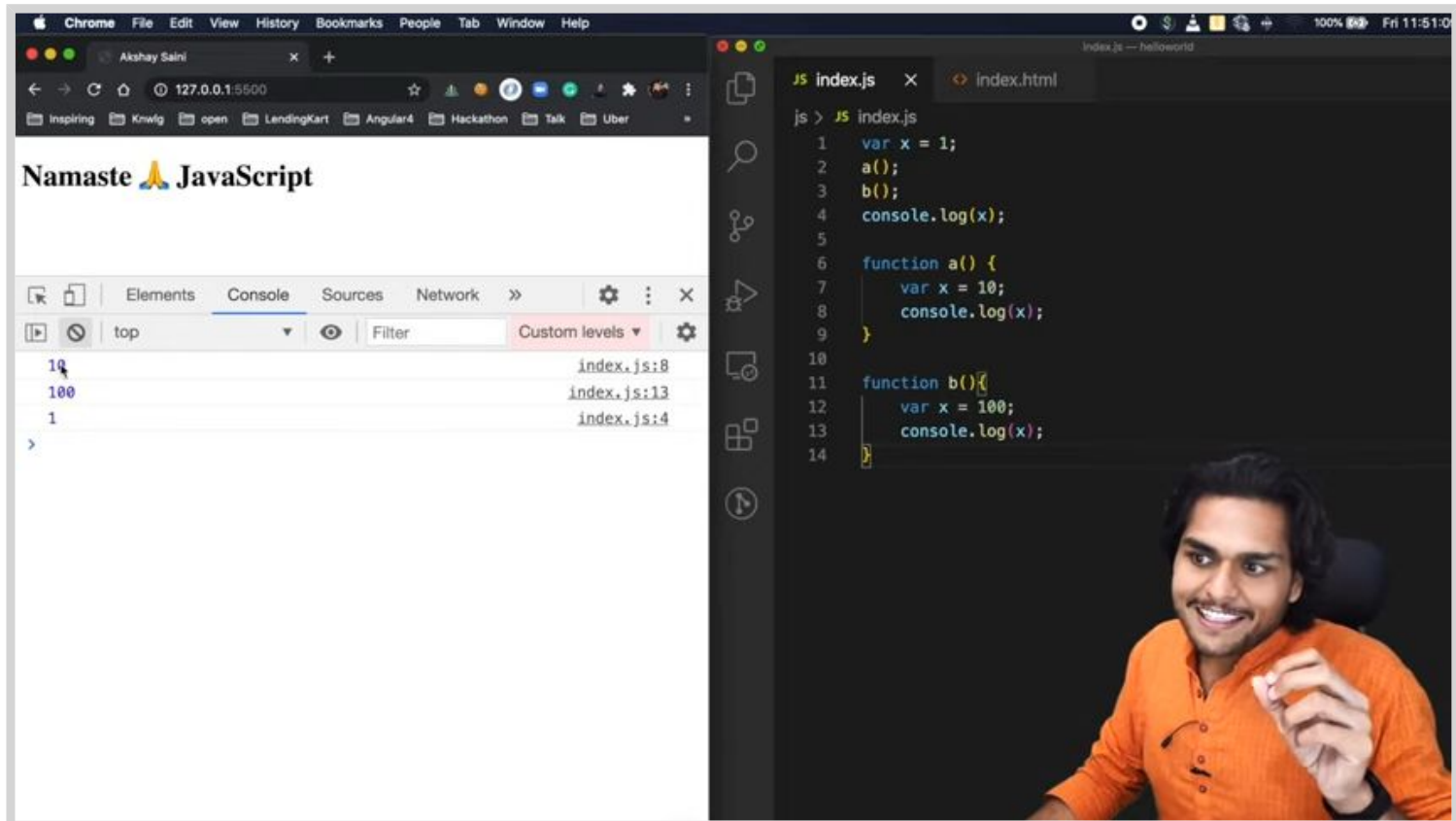


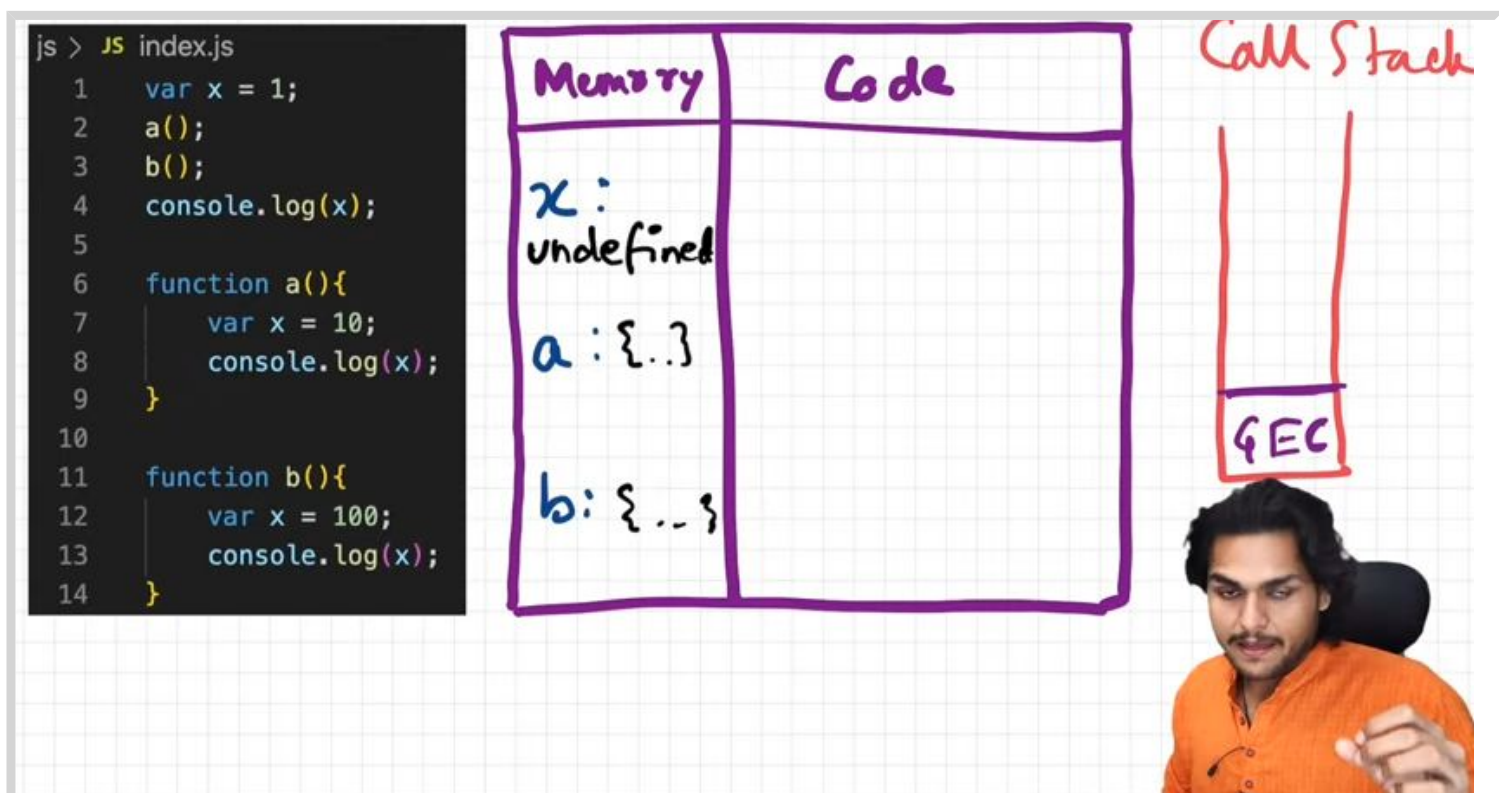
02:35



The screenshot shows a web browser window on the left and a code editor on the right. The browser window displays "Namaste 🙏 JavaScript" and the Chrome DevTools Console. The console shows the output of the JavaScript code: 10, 100, and 1. The code editor shows the following JavaScript code:

```
js index.js
1  var x = 1;
2  a();
3  b();
4  console.log(x);
5
6  function a() {
7    var x = 10;
8    console.log(x);
9  }
10
11 function b(){
12   var x = 100;
13   console.log(x);
14 }
```

04:49



The diagram illustrates the Call Stack and Memory/Code structure. On the left, the JavaScript code is repeated. In the center, a table with two columns, "Memory" and "Code", is shown. The "Memory" column contains the following entries:

- x: undefined
- a: {..}
- b: {..}

On the right, a vertical rectangle represents the "Call Stack". Inside the stack, a box labeled "GEC" is shown. The diagram is drawn on a grid background.


08:25

```
js > JS index.js
1  var x = 1;
2  a();
3  b();
4  console.log(x);
5
6  function a(){
7    var x = 10;
8    console.log(x);
9  }
10
11 function b(){
12   var x = 100;
13   console.log(x);
14 }
```

Memory	Code				
$x: 1$	$var\ x = 1$				
$a: \{..\}$	<table border="1"><thead><tr><th>M</th><th>C</th></tr></thead><tbody><tr><td>$x: undefined$</td><td>$var\ x = 10$</td></tr></tbody></table>	M	C	$x: undefined$	$var\ x = 10$
M	C				
$x: undefined$	$var\ x = 10$				
$b: \{..\}$					

Call Stack

→ 7	a()
2	EC



09:33

```
js > JS index.js
1  var x = 1;
2  a();
3  b();
4  console.log(x);
5
6  function a(){
7    var x = 10;
8    console.log(x);
9  }
10
11 function b(){
12   var x = 100;
13   console.log(x);
14 }
```


Memory	Code				
$x: 1$	$var\ x = 1$				
$a: \{..\}$	<table border="1"><thead><tr><th>M</th><th>C</th></tr></thead><tbody><tr><td>$x: 10$</td><td>$var\ x = 10$ $console.log(x);$</td></tr></tbody></table>	M	C	$x: 10$	$var\ x = 10$ $console.log(x);$
M	C				
$x: 10$	$var\ x = 10$ $console.log(x);$				
$b: \{..\}$					

Call Stack

→ 8	a()
2	EC

10

console



11:32

```

js > JS index.js
1  var x = 1;
2  a();
3  b();
4  console.log(x);
5
6  function a(){
7      var x = 10;
8      console.log(x);
9  }
10
11 function b(){
12     var x = 100;
13     console.log(x);
14 }
        
```

Memory	Code								
$x: 1$ $a: \{.. \}$ $b: \{.. \}$	$var x = 1$ <table border="1" style="border-collapse: collapse; width: 100%;"> <tr> <th style="padding: 2px 5px;">M</th> <th style="padding: 2px 5px;">C</th> </tr> <tr> <td style="padding: 2px 5px; vertical-align: top;"> $x: 10$ </td> <td style="padding: 2px 5px; vertical-align: top;"> $var x = 10$ $console.log(x)$ </td> </tr> </table> <table border="1" style="border-collapse: collapse; width: 100%;"> <tr> <th style="padding: 2px 5px;">M</th> <th style="padding: 2px 5px;">C</th> </tr> <tr> <td style="padding: 2px 5px; vertical-align: top;"> $x: 100$ </td> <td style="padding: 2px 5px; vertical-align: top;"> $var x = 100$ $console.log(x)$ </td> </tr> </table>	M	C	$x: 10$	$var x = 10$ $console.log(x)$	M	C	$x: 100$	$var x = 100$ $console.log(x)$
M	C								
$x: 10$	$var x = 10$ $console.log(x)$								
M	C								
$x: 100$	$var x = 100$ $console.log(x)$								

10


console

Call Stack

a()

b()

GEC



12:31

```

js > JS index.js
1  var x = 1;
2  a();
3  b();
4  console.log(x);
5
6  function a(){
7      var x = 10;
8      console.log(x);
9  }
10
11 function b(){
12     var x = 100;
13     console.log(x);
14 }
        
```

Memory	Code								
$x: 1$ $a: \{.. \}$ $b: \{.. \}$	$var x = 1$ <table border="1" style="border-collapse: collapse; width: 100%;"> <tr> <th style="padding: 2px 5px;">M</th> <th style="padding: 2px 5px;">C</th> </tr> <tr> <td style="padding: 2px 5px; vertical-align: top;"> $x: 10$ </td> <td style="padding: 2px 5px; vertical-align: top;"> $var x = 10$ $console.log(x)$ </td> </tr> </table> <table border="1" style="border-collapse: collapse; width: 100%;"> <tr> <th style="padding: 2px 5px;">M</th> <th style="padding: 2px 5px;">C</th> </tr> <tr> <td style="padding: 2px 5px; vertical-align: top;"> $x: 100$ </td> <td style="padding: 2px 5px; vertical-align: top;"> $var x = 100$ $console.log(x)$ </td> </tr> </table>	M	C	$x: 10$	$var x = 10$ $console.log(x)$	M	C	$x: 100$	$var x = 100$ $console.log(x)$
M	C								
$x: 10$	$var x = 10$ $console.log(x)$								
M	C								
$x: 100$	$var x = 100$ $console.log(x)$								

100


console

Call Stack

a()

b()

GEC



13:12

```


js > JS index.js
1  var x = 1;
2  a();
3  b();
4  console.log(x);
5
6  function a(){
7      var x = 10;
8      console.log(x);
9  }
10
11 function b(){
12     var x = 100;
13     console.log(x);
14 }
        
```

Memory	Code
$x: 1$	 var x = 1 M C x: 10 console.log(x)
$a: \{.. \}$	 var x = 10 console.log(x)
$b: \{.. \}$	 var x = 100 console.log(x)

100
100
console

Call Stack

GEC



13:31

```


js > JS index.js
1  var x = 1;
2  a();
3  b();
4  console.log(x);
5
6  function a(){
7      var x = 10;
8      console.log(x);
9  }
10
11 function b(){
12     var x = 100;
13     console.log(x);
14 }
        
```

Memory	Code
$x: 1$	console.log(x)
$a: \{.. \}$	
$b: \{.. \}$	

100
100
console

Call Stack

GEC



13:40

```
js > JS index.js
1  var x = 1;
2  a();
3  b();
4  console.log(x);
5
6  function a(){
7      var x = 10;
8      console.log(x);
9  }
10
11 function b(){
12     var x = 100;
13     console.log(x);
14 }
```


Memory	Code
x: 1	console.log
a: {..}	(x)
b: {..}	..

Call Stack

3 GEC

100
100

console



14:03

```
js > JS index.js
1  var x = 1;
2  a();
3  b();
4  console.log(x);
5
6  function a(){
7      var x = 10;
8      console.log(x);
9  }
10
11 function b(){
12     var x = 100;
13     console.log(x);
14 }
```

Memory	Code
x: 1	console.log
a: {..}	(x)
b: {..}	..

Call Stack

3 GEC

100
100
1

console

