

```

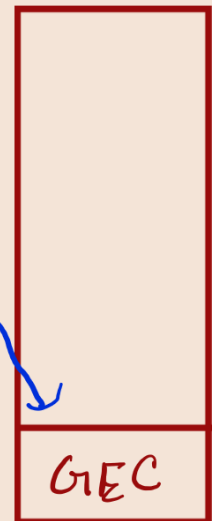
var x = 1;
a();
b();
function a() {
  var x = 10;
  console.log(x);
}
function b() {
  var x = 100;
  console.log(x);
}

```

1) First phase is memory creation

Memory	Code
x: undefined a: { ... } b: { ... }	

Call stack .



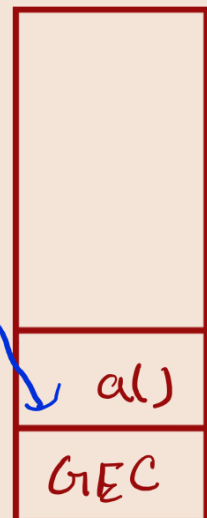
2) 2nd phase now code is executed.

① line → It assigns $x = 1$

② line → function a is invoked, execution context is created → pushed in call stack.

Call stack .

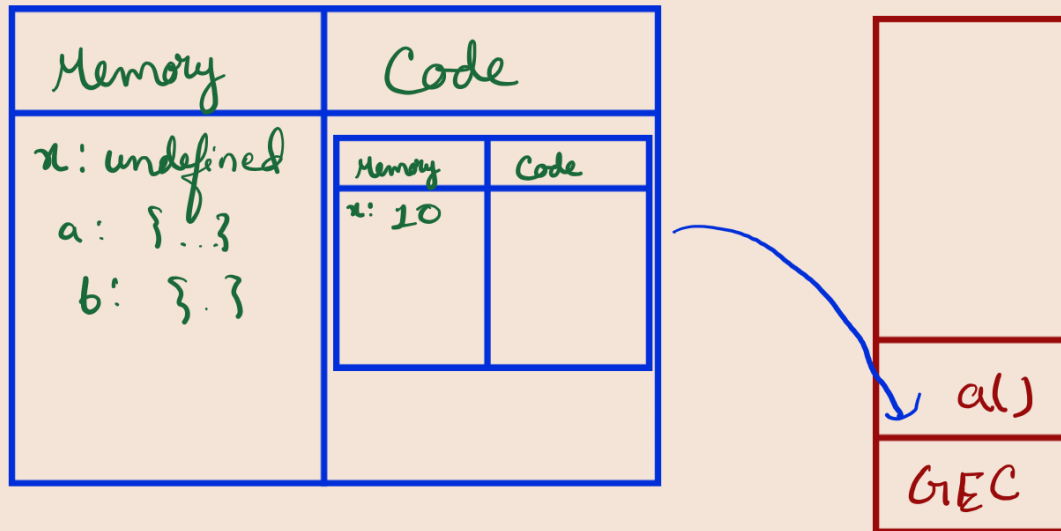
Memory	Code				
x: undefined a: { ... } b: { ... }	<table> <tr> <th>Memory</th><th>Code</th></tr> <tr> <td>x: undefined</td><td></td></tr> </table>	Memory	Code	x: undefined	
Memory	Code				
x: undefined					



The same steps will repeat inside execution context a1)

- memory allocation of x as undefined.
- then it will run the code and assign $x = 10$

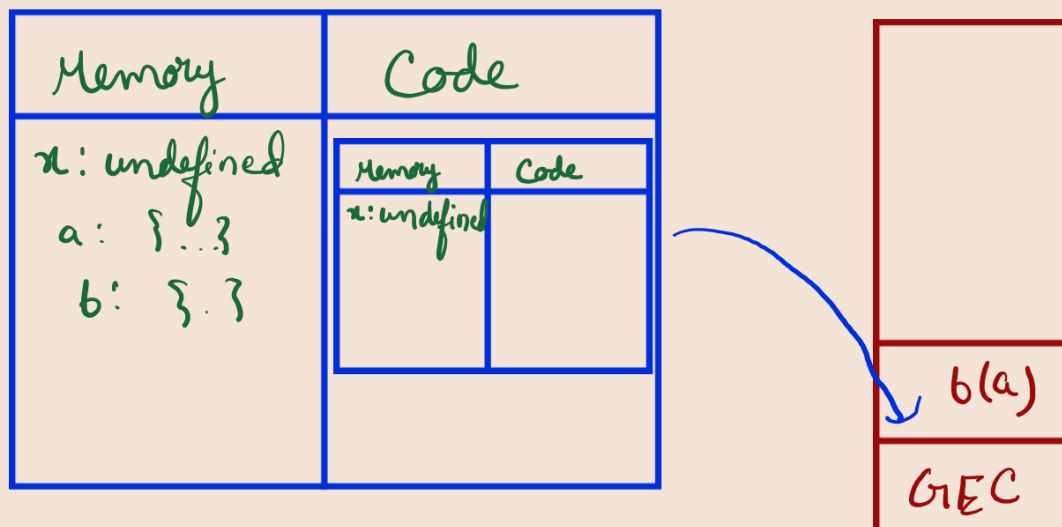
Call stack .



- then it encounters next line and tries to find value of x in local memory space
- then prints 10 in console
- execution is over, $a1()$ is popped out of call stack control goes back to GEC .

③ line \rightarrow function b is invoked, execution context is created \rightarrow pushed in call stack .

Call stack .



Same steps repeats and 100 is printed on console .

④ line \rightarrow 4th line is executed. It will look for value of x in local space. Over here value of $n=1$ is printed in context.

When there's nothing more to execute, whole execution context is deleted, GEC is popped out from Call Stack.