

JavaScript codes are execute in order, In the beginning of the code it will assign number 1 to variable "val " then console log will execute. Inside the console log there are 2 functions called "a" and "b" and there is an undefined variable and another variable called "val". Once console log executed it will print "[Function: a] [Function: b] undefined 1".

Then function "a" will execute because variable "a" define after function a() that's why it's called first . In the function "a" console log will execute first. Inside the console log there is a variable called "val" it's undefined because inside the function block there is no defined variable "val" then it will print undefined. Next within the function there is a local variable called "val" and it's equal to 2. After that it will print value 2. Next line consist of function "b". It will executed and move to function "b".

Inside of function "b" there is a console log which print "val" but inside the function variable "val" is not defined. Next, within the function there is a global variable which equals to 3. Then inside the function it will create a local variable called "val" it will equals to 4. Next it will print. It's the end of function "b". Next again will come to the last line of function "a" and will execute the last line. It will print 2 because the variable of "val" inside of the functions still equals to 2, the reason for that is it's a local variable. This is the end of the function.

Then according to the sequence inside of the function it'll print number 1. Next there are 3 variables called "a", "b", "c" values are equals to 1, 2, 3 accordingly. In the next line b equals to c and then a equals to b result of this a, b and c values will equals to 3. In the last line variables a, b, c will print 3,3,3.