

Chapter 9 Report

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Problem Description:

We have been given a snippet of code in the program language Java Script. We are to run it and see if the environment uses shallow, deep, or ad hoc binding.

Code:

```
CS 471 - Prog Lang Structure > Chapter 9 Problems > JS envin.js > sub1 > sub2
1  function sub1(){
2      var x;
3      function sub2(){
4          console.log("X: " + x); // Creates a dialog box with the value of x
5      }; // End sub2
6
7      function sub3(){
8          var x;
9          x = 3;
10         sub4(sub2);
11     }; // End sub3
12
13     function sub4(subx){
14         var x;
15         x = 4;
16         subx();
17     }; // End sub4
18
19     x = 1;
20     sub3();
21 }; // End sub1
22
23 // Call Function
24 sub1();
```

Output:

```
(base) keller@debianLaptop:~/Documents/Fall-2022/CS 471 - Prog Lang Structure/Chapter 9 Problems$ node envin.js
X: 1
```

Conclusion:

From what we see, the return value is 1. This means that this environment is running deep binding since the x value is obtained from sub 1.