

# PA 5: Binding of Global Variables During Subroutine Passing

**Name:** Indronil Bhattacharjee

**Date:** 03/29/2023

**Problem Description:** Implement the following pseudo-code in Javascript. Now we have to determine if JavaScript implements Shallow, Deep, or Ad Hoc Binding.

**Javascript code:** (pa5.js)

```
function sub1() {  
    var x;  
    function sub2() {  
        console.log(x);  
    };  
    function sub3() {  
        var x;  
        x = 3;  
        sub4(sub2);  
    };  
    function sub4(subx) {  
        var x;  
        x = 4;  
        subx();  
    };  
    x = 1;  
    sub3();  
};  
  
//Call the function  
sub1();
```

**Output:**

```
C:\Users\ICT\Downloads\CS_471\PA5_PLS_Indronil_Bhattacharjee>node pa5.js  
1
```

**Conclusion:**

From the results we can see, the return value is 1. This means that this environment is running deep binding since the x value is obtained from sub1.