

CHAPTER 4

EXERCISE SOLUTIONS

Q: What is output if the following JavaScript program is executed by a typical web browser? Explain.
`var i=5; function duh() { var i; window.i=6; } duh(); window.alert(i);`

Output: 6

Explanation:

i is created as a global variable with the value of 5.
Inside duh() function: i is declared as a local variable
Window.i updates the global variable i to 6
duh() function is called
window.alert() shows the value of i as 6.

Q: What is output if the following JavaScript program is executed by a typical web browser? Explain.
`var o1 = new Object(); o1.j = 9; var o2 = o1; function test(o1) { o1.j=10; return; } test(o1); window.alert(o2.j);`

Output: 10

Explanation:

o1 is an object with a property j=9
o2 references o1
test(o1) is a function it updates the value of j to 10
as o2 references o1 so the value of j for o2.j will also be 10

Q: What is the output of the following JavaScript program? Explain why this output is produced.
`function rusty(a) { this.x = a; return; } var o1 = new Object(); var o2 = new Object(); o1.rusty = rusty; o2.rusty = o1.rusty; o1.rusty(1); o2.rusty(2); window.alert(o1.x + "," + o2.x);`

Output: 1,2

Explanation:

rusty(a) it sets the value of this.x to a
o1.rusty -> adds the function to o1
o2.rusty -> also have the same function
o1.rusty(1) -> this.x=1
o1.rusty(2) -> this.x=1
the alert prints 1 , 2