2. Consider the execution of sub2 when it is called in sub4 in the following JavaScript program:

**function** sub1( ) {

**var** x;

**function** sub2( ) {

alert(x); //Creates a dialog box with the value of x

};

**function** sub3( ) {

**var** x;

x = 3;

sub4(sub2);

};

**function** sub4(subx) {

**var** x;

x = 1;

subx( );

};

//still in sub1

x = 4;

sub3( );

};

What is the reference environment of this execution for **shallow binding**, **ad hoc binding**, and **deep binding**?

**Shallow Binding:** sub4 passing sub2, the x in sub2 is bound to the x is sub4, the output is 1.

**Ad Hoc Binding:** this references the local x in sub3, the output is 3.

**Deep Binding:** sub2 references the environment of sub1, x in sub2 is bound to x in sub1, the output is 4.