**Javascript Exercises**

**1. What is the difference between the following 2 statements?**

setTimeout(booyah, 2000);

is executed after the specified amount of time

setTimeout(booyah(), 2000);

executed right away

**2. What do the following 2 alerts display (answer without running the code)?**

var myfunc = function(a, x) {

return a \* x;

};

var x = myfunc(2, 3);

var y = myfunc;

alert(x);

displays 6 in alert dialog

alert(y(2,3));

displays 6 in alert dialog

**3. Write functions booyah1 and booyah2 so that in both cases below, an alert box comes up after 2 seconds that**

says “BOOYAH!”

setTimeout(booyah1, 2000);

setTimeout(booyah2(), 2000);

window.onload=function(){

let b1=document.getElementById('btnBooyah1');

let b2=document.getElementById('btnBooyah2');

b1.onclick=function(){

setTimeout(booyah1, 2000);

};

b2.onclick=function(){

setTimeout(booyah2(), 2000);

};

};

function booyah1(){

alert('Booyah 1');

}

function booyah2(){

alert('Booyah 2');

}

**4. What is "Unobtrusive JavaScript"? What is the practical application of Unobtrusive JavaScript (and the reasons for using it)?**

JavaScript programs should be written in such a way that site visitors are not blocked out of the site for any of the following reasons

1. Browser lacks JS support or it is disabled by the user or the corporate firewall.
2. Browser may not understand parts of script because it has a proprietary implementation of some parts of the DOM specification.
3. Even with perfect presentation layer, i.e. HTML, we cannot be certain of the input device our users will use. Many scripts work only when the user uses a mouse and forget about people who use the keyboard instead.
4. Even when your script avoids all these dangers and works perfectly, other programmers may not understand it.

Unobtrusive JavaScript is a way of writing JavaScript code that add following features to JavaScript programming.

1. **Separation of structure and behavior**

HTML, CSS and JavaScript code must be separated. This helps develop clean, semantic HTML, and makes maintenance easier.

1. **Adding usability layer**

The purpose of JavaScript is to add a layer of usability to our site. If the script is the entire usability layer and the site is unusable without it, then, the code not unobtrusive at all. An unobtrusive code follows 3 basic principals

1. Our site should work without JavaScript.
2. If JavaScript happens to be enabled, we can present your users with an extra layer of usability; a layer that allows them to perform their tasks more quickly, and that avoids jarring page reloads where possible.
3. JavaScript is unsafe. One can easily bypass the JS validation, so, we should use JavaScript in addition to server-side form validation. The former gives us a smoother interface, but only the latter gives us proper security.

To write unobtrusive make sure the scripts do not inconvenience anyone and do not make any assumptions like

1. everybody’s browser supports JavaScript
2. all browsers work the same
3. everybody else will understand my code