1.

setTimeout(booyah, 2000);

this one passes the function itself to setTimeoout. It calls booaah after 2 seconds.

setTimeout(booyah(),2000);

this one calls booyah and passes the result to setTimeout. It calls the return of booyah (if it is a function) after 2 seconds.

2.

Both will alert 6;

3.

function booyah1(){

    alert("BOOYAH")

}

function booyah2(){

    return booyah1;

}

setTimeout(booyah1, 2000);

setTimeout(booyah2(), 2000);

4.

separation of content (HTML) and behavior (Javascript)

Placing scripts in external files has some advantages:

It separates HTML and code

It makes HTML and JavaScript easier to read and maintain

Cached JavaScript files can speed up page loads