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Unit 7 Assignment
CIS 81 – Javascript and Dynamic HTML
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Chapter 5:

## **Chapter 5 Exercise:**

## 18. Explain, in detail, what happens when this script is run:

The script starts by running the call to the function named shout. The function runs and there is a local variable that runs in the scope of the function called "message" which contains a string that is assigned in the function and then the assigned message is alerted.

The script then attempts to run the final line which is another alert for the value of the variable 'message'. This alert fails and returns 'not defined and here is why: the only assignment of the variable message occurs within the scope of the function and variables assigned within functions only work within the scope of the function. The second alert using the variable message is outside of the scope of the function, resulting in it being undefined. While a function can use global variables declared and assigned outside of its scope, variables declared and assigned inside of the function cannot be used outside of the scope of the function.

## 19 . Explain, in detail, what happens when this script is run:

There are two lines using the 'alert' function which is a built-in function that sends a message alert to the user. However, the alert function is assigned to "2" and that overrides the value (operation) of the built-in function. If you then try to use the alert function for the built-in operation, it will fail to function because now its value is simply "2" and there is no associated operating function. You can verify the value by using 'document.write(alert);' which will return "2".

27. Write a constructor for movie objects. A movie has a title, an MPAA rating, a list of directors, a list of producers, a studio, and a release date.

```
var Movie = function (title, rating, directors, producers, studio, reldate) {
this.title = title;
this.rating = rating;
this.directors = directors;
this.producers = producers;
this.studio = studio;
this.reldate = reldate;
};
```

- 30. JavaScript comes with a built-in object called Date, which is a constructor. Research this function and answer the following:
  - (a) What does the expression new Date() produce?
  - (b) What does the expression new Date( 2009,0,20) produce?
  - (c) If d1 and d2 refer to date objects, what does the expression d1. valueOf() d2. valueOf() produce?
- (a) The expression "new Date()" creates a new date object with the current date and time.
- (b) creates a new date object from the date specified: January 20, 2009.
- (c) The valueOf() method returns a Date object's primitive value. The primitive value is the number of milliseconds since midnight January 1, 1970 UTC. It is a whole number, i.e., "1468744140022" representing the current date. Therefore, the given expression would result in a whole number which was the difference between the primitive values d2.valueOf() and d1.valueOf().