Problem Analysis: This exercise asks the user to enter a series of string and display only those strings that ends with the letters “ed.”

Solution: Open the file entitled ‘solution 11.16’ and examine the code.

Lines #12-17 creates a form to read input string from the user into the object named input. It also creates a button, and output textbox consisting of 10 rows and 55 columns for displaying the strings.

Line #9 calls a Java script that contains the following code:

```javascript
// Exercise 11.16 Solution
var input;
var output;

function start() {
    document.getElementById( "submitButton" ).addEventListener( "click", testString, false );

    input = document.getElementById( "input" );
    output = document.getElementById( "output" );
} // end function start

function testString() {
    var s = input.value;
    // Check if last two characters in string are "ed"
    // (s.length - 2) is the index of the 2nd to last character,
    // so compare the substring of length 2, beginning at
    // (s.length - 2) to the string "ed"
    if ( s.substr( s.length - 2, 2 ) == "ed" )
        output.value += s + "\n";
    else
        alert( "The string you entered does not end with 'ed'" );

    input.value = "";
    input.focus();
} // end function testString

window.addEventListener( "load", start, false );
```

The code above declares two functions: start() and testString(). The start() function calls the testString() function when the user click the submit button.

When the program runs, getElementById method of the document object allows the user to input a string and assigns it to the input object. When the user click the submit button the start() function invokes the testString() function. The text stored in the input object is assigned to a variable named ‘s’. The following code performs the comparison to see if the input string ends with the letters ‘ed’:

```javascript
if ( s.substr( s.length - 2, 2 ) == "ed" )
    output.value += s + "\n";
```
It begins with `if` statement. In the parenthesis a method named ‘`substr`’ is used to find the last two characters of the string entered by the user. This method has two arguments in the inner pair of parenthesis: `s.length -2` and number two separated by a comma. The first argument of the method `s.length -2` determines the number of characters in the string and subtract 2 from it. In other words it gives you the start index of the string to compare. The second argument is two because we are comparing the last two characters of the string. If the last two characters of the string in variable ‘`s`’ are equal to “ed” then the result of the if statement will be true otherwise it will be false. If the result of the `for` statement is true then the code below the `if statement` will be executed. This code will add the content of the variable ‘`s`’ to the previous content of the output box and display it in the display area by inserting a blank line. However, if the string does not end with the letters ‘ed’ then an alert window will display the appropriate message. The code ends with clearing the input textbox and passing the focus to it to receive another string.