

## Web-Based Application Design and Development (ITIS 3135)

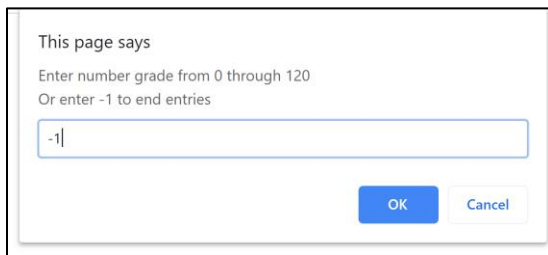
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### Activity 6: Converting number grades to letter grades

The goal of this activity is to give you some practice with if statements, loops and functions in JavaScript. The provided HTML page is for you to add embedded JavaScript code that can convert number grades to letter grades. To see the runtime errors, use the debugger tool in your browser.

#### Application Overview:

To start, this application should display a prompt dialog box like the one below that gets a number grade from 0 through 120



This page says

Enter number grade from 0 through 120  
Or enter -1 to end entries

OK Cancel

Then, it should display an alert dialog box like the one below that displays the letter grade for that number. The statement “Prevent this page from creating additional dialogs” does not have to be there.



This page says

Number grade = 110  
Letter grade = A

OK

#### Part 1: Convert number grades to letter grades

1. From Canvas, download *Activity6.html*.
2. Rename them to *Lastname-Activity6.html* and save it in your **Exercise** folder.
3. Create a JS file called *Lastname-Activity6.js* and save it in your **Exercise** folder.
4. Open the HTML file. In the script element, add the link to the js file replacing the “???”.
5. In the js file add JavaScript code for getting the user’s entry while the entry amount isn’t “-1”. This should provide for multiple entries until the user enters “-1”.
6. Add the JavaScript code for deriving the letter grade from the table below and displaying it in an alert dialog box.

To derive the letter grade, you should use this table:

A	100-120
B	80-99
C	70-79
D	60-69
F	< 60

7. If you haven’t already done so, add data validation to make sure the entry is a valid number from 0 through 100. If the entry is invalid, the application should just display the starting prompt dialog box. It doesn’t need to display a special error message.



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8. Verify that the code runs as expected.
9. Add appropriate comments in your code

### **Part 2: Update the code by adding a function (if you have not used a function yet)**

1. Declare a function 'replaceGrades' that takes in number grade as a parameter and returns a letter grade.
2. Modify the code so that it now utilizes this function to convert the grades and show the same output as above
3. Verify that the code runs as expected.
4. Add appropriate comments in your code

### **Part 3: Upload to your web server and turn in your activity**

1. Verify that your final webpage is accessible by going to  
<https://webpages.uncc.edu/yourUsername/Exercise/Lastname-Activity6.html>

### **Part 4: Turn in your activity**

1. Log in to Canvas.
2. Go to the Activity #6 Submission link. Upload the upload the html and js files to the submission page.
3. In the "Comments" textbox on Canvas provide the URL of your html file on the web server. You must provide the correct URL to get credit.