IT 411 Midterm Report Example

Concept: Appending string content using concatenation and reassignment

General value: Concatenation and reassignment is generally useful for appending additional content (strings) to a string reference. It allows JS code to add to any content in the innerHTML of a page element.

Context: This code was used to append a total calculation to html content that was already displayed with one of the tip calculators.

Exemplifying code

```
let total = Number(bill) + calculated_tip;
result_box.innerHTML += "<br>The total is $" + total.toFixed(2);
```

Purpose of example: It uses the += operator to refer to the existing html content, concatenate additional content, and then reassign it back to the `innerHTML` that is displayed to the user.

Explanation

The `result_box` variable already refers to a paragraph tag used to display content. It was previously initialized outside of the click handler with this statement:

```
let result_box = document.getElementById('tip');
```

The first statement in the exemplifying code assigns the variable total to be equal to the sum of the bill and the `calculated_tip`. Note that bill needs to be converted to a number because it originates as a string from a text box.

On the next line of the exemplifying code, the total is rounded to a string (with `toFixed`) and then concatenated to a phrase to produce a string. The += operator concatenates this string to the existing `innerHTML` and the resulting string is reassigned to the `innerHTML` referenced by the variable `result_box`. Note that the `<br>` tag will be interpreted as html code to force a line break in the browser.