Question 1:

Write a JavaScript program that allow us to keep track of assistance students receive in a TA room. For this problem:

- Define a form with a textfield and two buttons (see example below for format information).
- Users will enter in the textfield an entry that has the following format:

  <DIRECTORY_ID> <DESCRIPTION> <DURATION>

  The string provides the student's directory id, followed by a description of the assistance the student received, followed by the amount of time the TA provided assistance (e.g., terp, debugging code, 20). Each of these values is separated by a comma.

- After providing an entry and pressing the AddEntry button, your program will add the entry under the section labeled "Entries". If the entry provided is empty or if not all values (directory id, etc.) have been provided, the program will display the message "Invalid entry" (using alert) and will perform no further processing. You can assume that if the entry has two commas, all the fields have been provided.
- If the user selects the Summary button, your program will display under the section labeled "Summary" the number of entries that have been submitted followed by the entries sorted by duration. No commas will separate the components of an entry.
- A main function will designate a function named addEntry as the function the AddEntry button will call when selected. It will also designate a function named summary as the function that will be called when the Summary button is selected. Feel free to add any other functionality to the main function you understand is needed.
- Notice that the HTML and JavaScript appears in a single file.
- Feel free to add any functions and/or custom types you understand you need.

Form (Step1)

Entry: [   ]

[AddEntry] [Summary]

Entries

Summary

After Adding Three Entries (Step2)

Entry: [peter, validation, 9]

[AddEntry] [Summary]

Entries

mary, debugging code, 15
terps, testing, 7
peter, validation, 9

Summary

After Selecting Summary (Step3)

Entry: [peter, validation, 9]

[AddEntry] [Summary]

Entries

mary, debugging code, 15
terps, testing, 7
peter, validation, 9

Summary

Total: 3
terps testing 7
peter validation 9

Question 2

Write a JavaScript program that allow us to display in a table links to webpages. The links will be generated based on following array that will be a global variable:

let data = ["syllabus.html", "p1.html", "p2.html", "style.html", "email.html", "system.html", "process.html"];

For this problem:

- Define a form with two text fields and a button (see example below for format information).
- The first text field represents the first entry (position, not index) from the data array we want to use to generate links.
- The second text field represents the last entry (position, not index) from the data array we want to use to generate links.
- Both text fields have a default value of 1.
- Based on the text field values provided, your code will generate an HTML table where each entry is a link. For example, if the user enters 1 for both text fields, the table will have the HTML entry syllabus.html.
- Your code must work for values in the data array that are different than the ones we have provided.
- When the form is initially loaded, the message "Valid Range: 1-<END_RANGE>" where <END_RANGE> represents the last position in the array, must be displayed. For example, for the above array <END_RANGE> is 7, but this will change based on the data array we use.
- If the user enters an invalid range, the program will display the message "Invalid range, valid range: " followed by 1-<END_RANGE>. Assuming <END_RANGE> is 7, the following will be considered a valid range: Start Range 2; End Range 5. The following will be invalid: Start Range: 8; End Range 16.
- A main function will define a function named displayTable as the function the displayTable button will call when selected. Feel free to add any other functionality to the main function you understand is needed.
- Notice that the HTML and JavaScript appears in a single file.
- Feel free to add any functions in addition to the displayTable and main functions.
- You can assume the above data array has been defined as a global variable in your code (you do not need to define it).

Links Generator

Start Range: 1   End Range: 1

displayTable

__Valid Range: 1-7__

Links Generator

Start Range: 1   End Range: 10

displayTable

__Invalid range, valid range: 1-7__

__After Providing a Valid Range and Clicking on the Button__

Links Generator

Start Range: 2   End Range: 5

displayTable

p1.html
p2.html
style.html
email.html