In-class Activity: Week 7

Overview

This is the first in a series of “hands-on” activities in which we will use Komodo (or any editor of your choice) to construct an integrated HTML, CSS, and JavaScript web-page that demonstrates our understanding of a clearly-stated set of learning objectives.

Objectives for this week:

• Using the window.prompt and window.alert methods effectively in JavaScript.
• Using variables and constants in JavaScript.
• Constructing and using user-defined functions and procedures in JavaScript.
• Using JavaScript conditional and iterative statements to validate user-input.
• Commenting JavaScript code to inform and as a way of confirming our understanding of the reasoning behind the implementation.

Problem Description

Use HTML, CSS, and JavaScript to create a web-page that

• Prompts the user for two positive integers that are not to exceed a predefined “constant.”
• Use these numbers to perform the following operations:
  • Sum: which is their arithmetic sum
  • Absolute Difference: which is their difference expressed as a non-negative integer. In other words, the absolute difference of two positive integers is their non-negative difference.
  • Product: which is their arithmetic product.
  • Quotient: their integer quotient. If the result of their division gives a non-zero remainder, then that remainder is also shown as part of the display in the web-page.

Students should pay attention to the “demonstration” done in class as a starting point for their own design.

Note: your implementation need not construct a table, but may construct any display that you feel shows these results.