# Input

1. Form button
   1. btnCalc
      1. Window prompt
         1. Test score number (will be a string)

# Output

1. Span tags
   1. Last score entered
      1. spnLast
   2. Total of scores
      1. spnTotal
   3. Average of scores
      1. spnAvg
   4. Highest score
      1. spnHigh
   5. Lowest score
      1. spnLow

# Process

## When the Page Loads

1. Store the HTML objects
   1. btnCalc

## When the Button is Clicked

1. Store the HTML objects & bind variables for later use
   1. spnLast, spnTotal, spnAvg, spnHigh, spnLow
   2. numLast, numTotal, numAvg, numHigh, numLow, numFinal
2. Prompt a window asking for a test score
   1. numScore = Window.prompt(“Enter a test score between 0 and 100. Enter 999 to end the program.”)
      1. This should be a function
      2. Multiply by 1 to automatically convert this into a number
3. While loop that checks if the test score isn’t 999 – because we don’t know how many test scores are being entered
   1. While (numLast != 999)
4. Nested while loop so numLast will update and we don’t get stuck in an infinite loop
   1. While (numLast < 0 || numLast > 100)
5. Use a logical structure to check if a new worst or best score is detected
   1. if(numLast > numHigh)
   2. if(numLast < numLow)
      1. These should be a function for reusability
6. Calculate the average and total
   1. numAvg
   2. numTotal
      1. These should be a function for reusability
7. Alert that the score has been updated and re-prompt the user
8. Insert the number values into the appropriate span tags
   1. spnLast, spnTotal, spnAvg, spnHigh, spnLow

# Assignment Instructions

1. Create a web page that contains a form with five text boxes (or divs, or spans - wherever you want to put your output), labeled:
   * Last score entered
   * Total of scores
   * Average of scores
   * Highest score
   * Lowest score
2. Add a button to the form. When the button is pressed, **prompt**the user to enter a test score between 0 and 100 =or= to enter 999 in order to end the program. (Hint: review the [window.prompt()](https://developer.mozilla.org/en-US/docs/Web/API/Window/prompt) method)  
   * When the user enters 999, the prompt should no longer re-appear
   * If the user enters a non-numerical value, the prompt should re-appear, with an updated message indicating that there was an error in the input
   * If the user enters a value less than zero or more than 100, the prompt should re-appear, with an updated message indicating the error in the input
   * If the user enters a value between zero and 100:
     + update variables to store the most recently entered value, the new total, the new average, a new best score (if applicable) and a new worst score (if applicable)
     + The prompt should re-appear to allow users to enter a new value
   * When the loop is complete, the last entered score, the total of scores, the average score, the best score and the worst score should all display on the page