# APSU Coding Camp #A : Assignment 5

**Total estimated time** for this assignment: **10 hours**

When you see "Richard Ricardo" in the example screen captures, change it to **<your name>**.
When you see "Richard" in the example screen captures, change it to **<your first name>**.
If you do not put **<your name>** / **<your first name>** in the above mentioned fields, you will get **0 points** for the question(s).

**No two students** should submit webpages with exactly the same code, or same content, or same layout, or same color combination. If found, **both** students will get **0 points**.

Create a folder on your hard disk, name the folder **lastname_firstname_assignment5.** Save all the files from this assignment in this folder.

Create the following subfolders (in the folder lastname_firstname_assignment5)**: q1, q2, q3, q4**.
As a result, you should have the following folder (directory) structure for this assignment: (-2 points if wrong)
- lastname_firstname_assignment5\q1\
- lastname_firstname_assignment5\q2\
- lastname_firstname_assignment5\q3\
- lastname_firstname_assignment5\q4\

Use Firefox **Web Console** (Tools > Web Developer > Web Console) to help debugging JavaScript. All html (JavaScript) files must pass JavaScript validation at Firefox Web Console without any error, without any warning **(-2 points for each error, each warning)**.
- Turn on your Firefox **Menu Bar** (Hint: right-click).
- Make sure your Firefox is up to date (Help > About Firefox).
- Turn on Web Console when you code (Tools > Web Developer > Web Console).
- Fix any error/warning immediately when you see them. Do NOT accumulate errors.

When you view page source in a web browser, `<!DOCTYPE html>` must be at the top of every page. In other words, all pages must be written in HTML5. **(-20 points** if not)
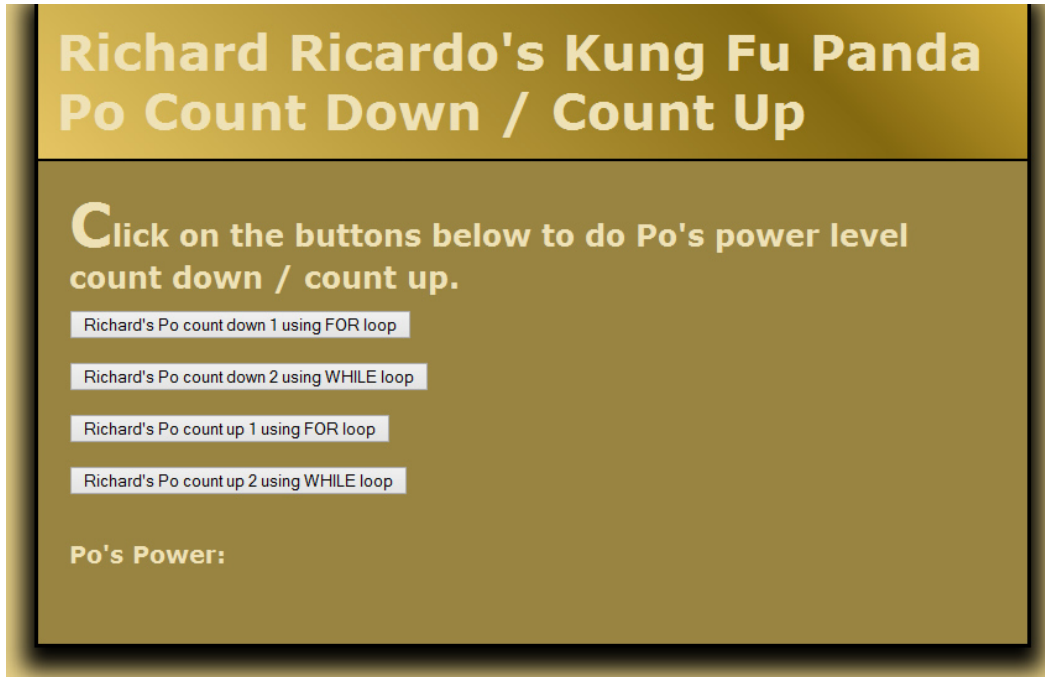
**Question 1** – JavaScript Chapter 4 (25 points)                          **Estimated time: 2 hours**

- Save question 1 files in subfolder "**lastname_firstname_assignment5\q1\**". (-20 points if no JavaScript)
- Create a web page that displays the default information (example shown).     (1 point each, total 5 points)
- The initial page and related outputs should look like the examples shown below.
- Create your page using "**<your name>**'s Kung Fu Panda Po Count Down / Count Up**"** as the page title. Save the page as **index.htm**. Document the html file with html and JavaScript comments. (1 point each, total 3 points)
- Allow the user to click on one of the four buttons.
  - Use **for** loop to achieve button 1's effects                                        (4 points)
  - Use **while** loop to achieve button 2's effects                                      (4 points)
  - Use **for** loop to achieve button 3's effects                                         (4 points)

- o  Use **while** loop to achieve button 4's effects                                    (4 points)
- Create a css file named **style.css** to format index.htm by creating your own layout (no two students should have the same layout). Use css comments to document the css program. You can use **the same (or similar) css file(s)** to format all questions.                                    (1 point each, total 2 points)
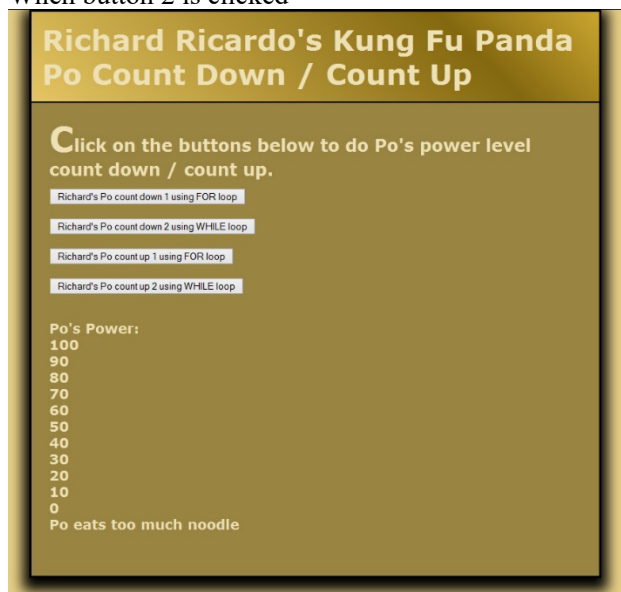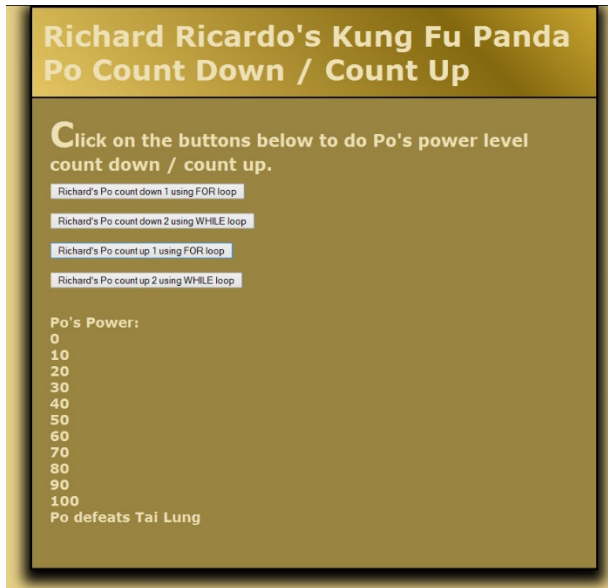
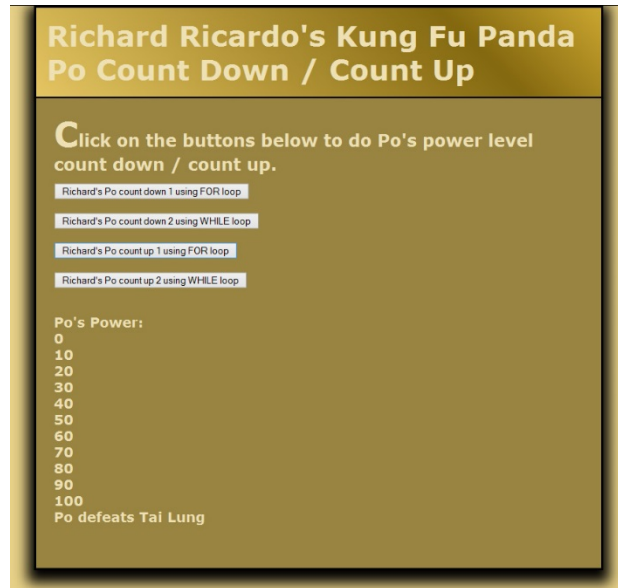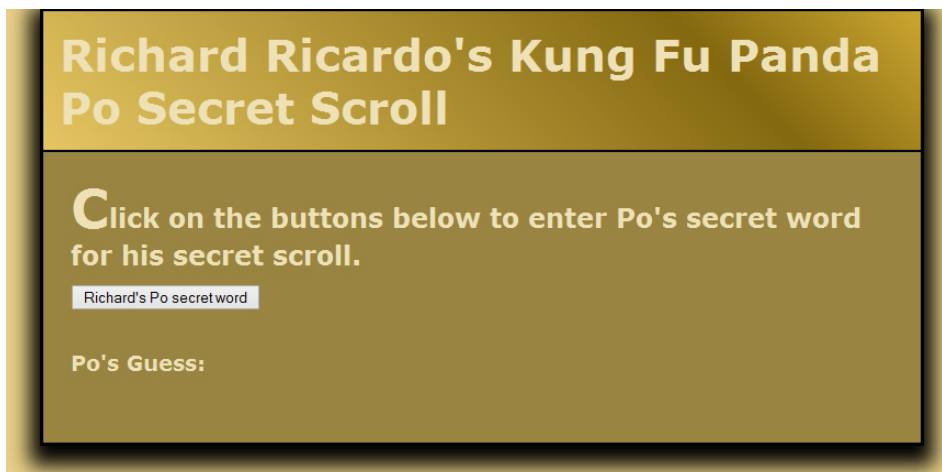Example: Initial Page



Example: Output

When button 1 is clicked
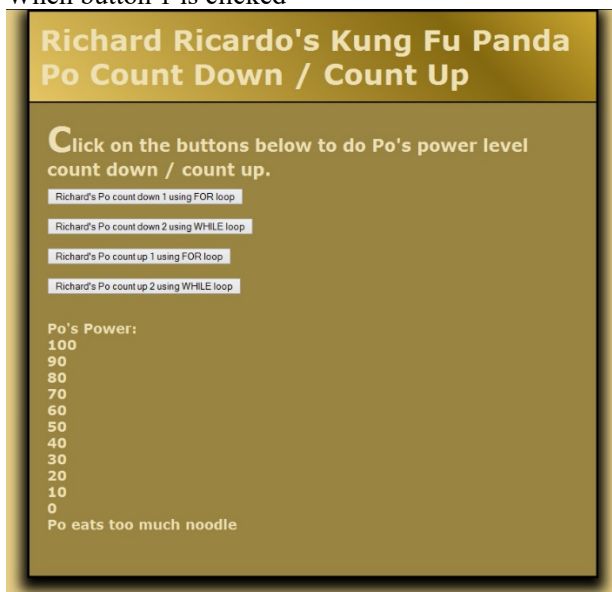


When button 2 is clicked

When button 3 is clicked                                    When button 4 is clicked

                                       
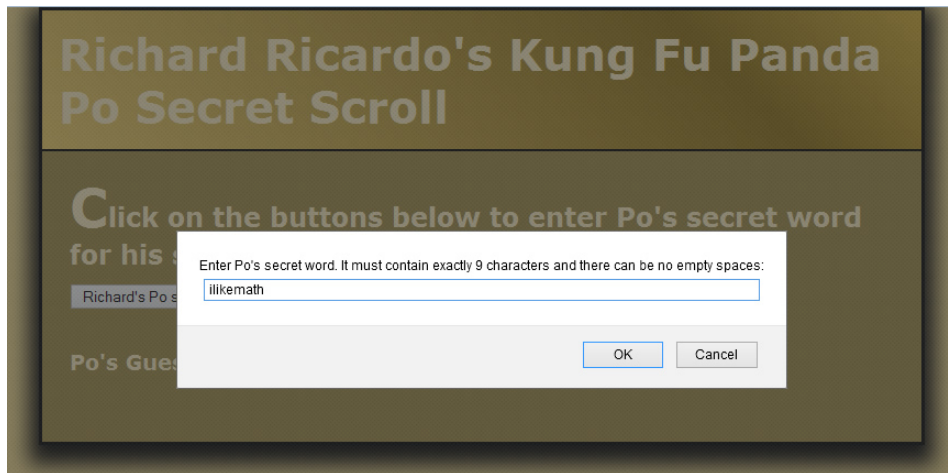
**Question 2** – JavaScript Chapter 4 (25 points)                      **Estimated time: 3 hours**
- Save question 2 files in subfolder "**lastname_firstname_assignment5\q2\**".   (-20 points if no JavaScript)
- Create a web page that displays the default information (example shown).      (1 point each, total 4 points)
- The initial page and related outputs should look like the examples shown below.
- Create your page using "**<your name>**'s Kung Fu Panda Po Secret Scroll**"** as the page title. Save the page as **index.htm**. Document the html file with html and JavaScript comments.      (1 point each, total 3 points)
- Write a program that asks the user for Po's secret word.
    - The secret word must have exactly **nine characters** and **may not include spaces**. (8 points)
    - All other keyboard characters are allowed.
    - A **loop (while** or **do…while)** should prompt the user to re-enter another secret word until **both** these conditions are met.                      (10 points for loop logic, 2 points for output format)
- Create a css file named **style.css** to format index.htm by creating your own layout (no two students should have the same layout). Use css comments to document the css program.          (1 point each, total 2 points)
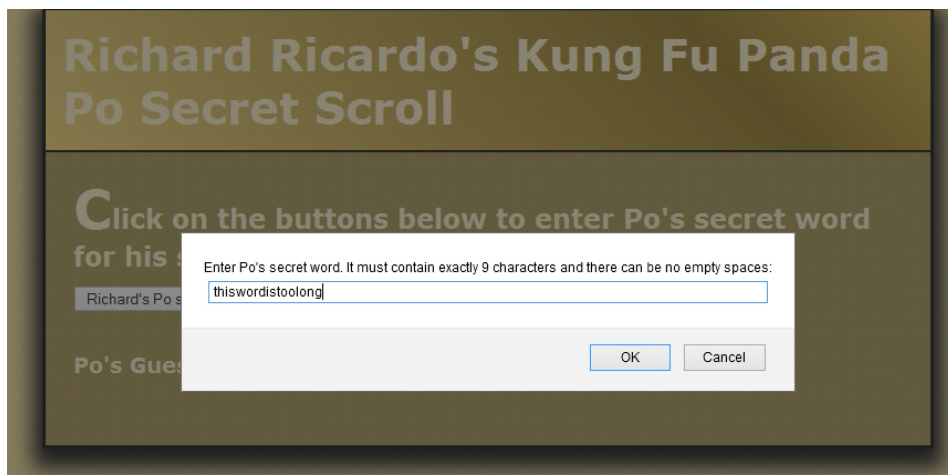
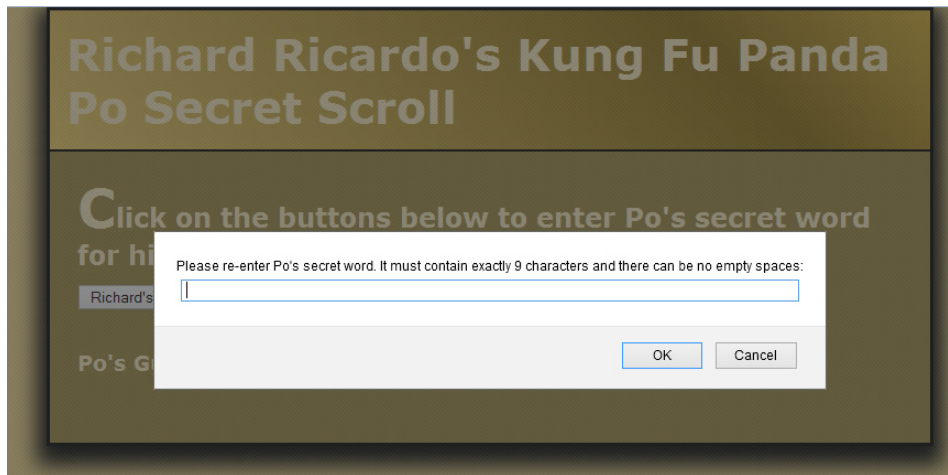Example: Initial Page

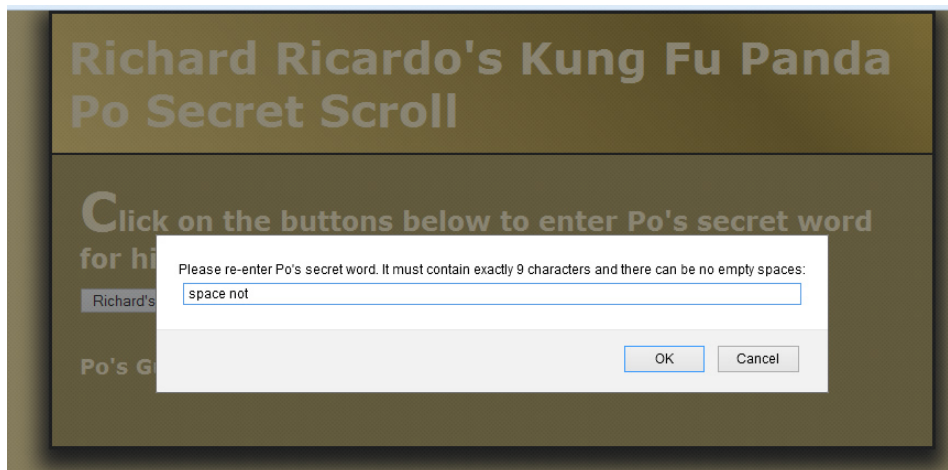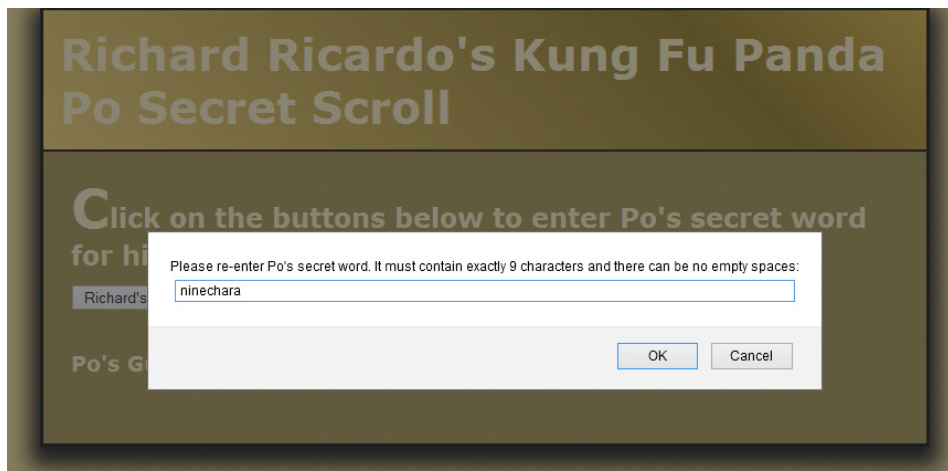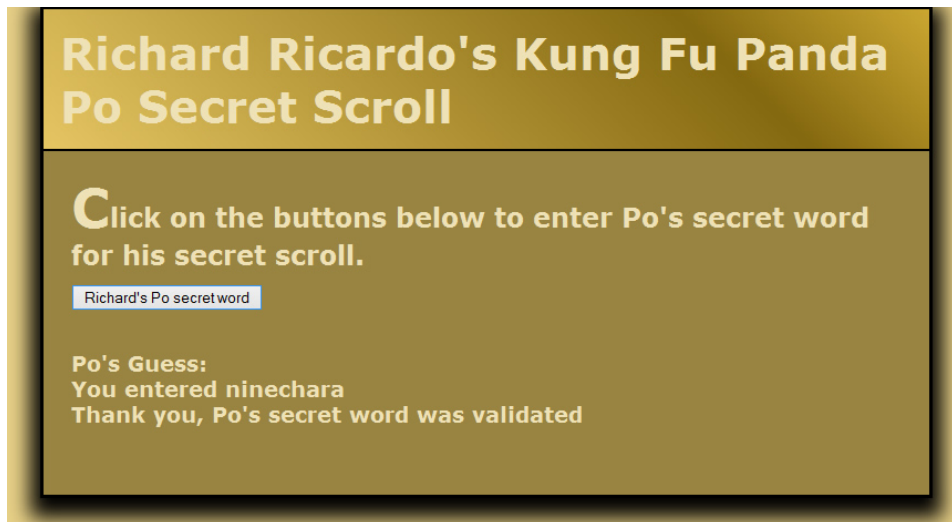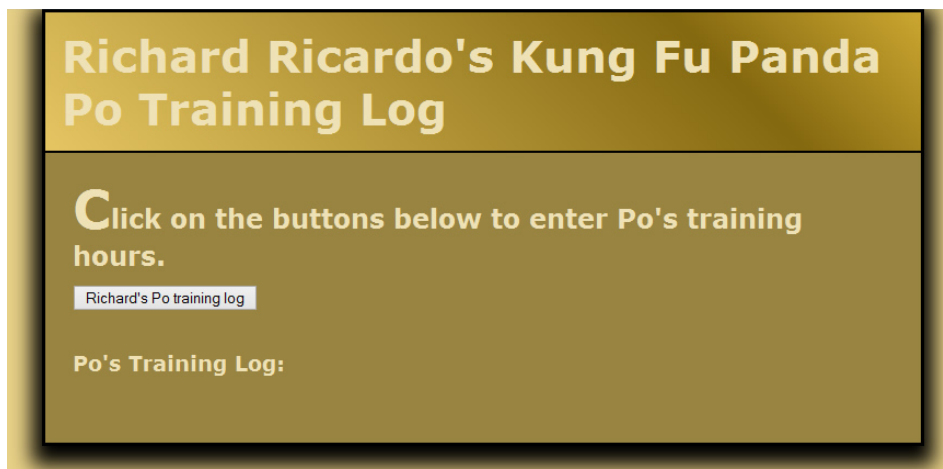Example: Input q2a



Example: Output q2a



Example: Input q2b

Example: Output q2b

Richard Ricardo's Kung Fu Panda
Po Secret Scroll

Click on the buttons below to enter Po's secret word
for hi

Please re-enter Po's secret word. It must contain exactly 9 characters and there can be no empty spaces:

Richard's

Po's G

    OK        Cancel

Example: Input q2c

Richard Ricardo's Kung Fu Panda
Po Secret Scroll

Click on the buttons below to enter Po's secret word
for hi

Please re-enter Po's secret word. It must contain exactly 9 characters and there can be no empty spaces:

space not

Richard's

Po's G

    OK        Cancel

Example: Output q2c and Input q2d

Richard Ricardo's Kung Fu Panda
Po Secret Scroll

Click on the buttons below to enter Po's secret word
for hi

Please re-enter Po's secret word. It must contain exactly 9 characters and there can be no empty spaces:

ninechara

Richard's

Po's G

    OK        Cancel

Example: Output q2d



**Question 3** – JavaScript Chapter 4 & 5 (25 points)                    **Estimated time: 2 hours**
- Save question 3 files in subfolder "**lastname_firstname_assignment5\q3\**".   (-20 points if no JavaScript)
- Create a web page that displays the default information (example shown).      (1 point each, total 4 points)
- The initial page and related outputs should look like the examples shown below.
- Create your page using "**<your name>**'s Kung Fu Panda Po Training Log**"** as the page title. Save the page as **index.htm**. Document the html file with html and JavaScript comments.      (1 point each, total 3 points)
- Write a program that allows the user to enter Po's training hours for each month.
    - Allow user to enter as many data set as desired (You must use **do...while** loop, 10 points).
    - The output should look like the example output shown.          (2 points for output format)
    - The program should also calculate Po's **total** training hours.     (5 points)
- Create a css file named **style.css** to format index.htm by creating your own layout (no two students should have the same layout). Use css comments to document the css program.  (1 point each, total 2 points)

Example: Initial Page

Example: Input q3

Example: Output q3
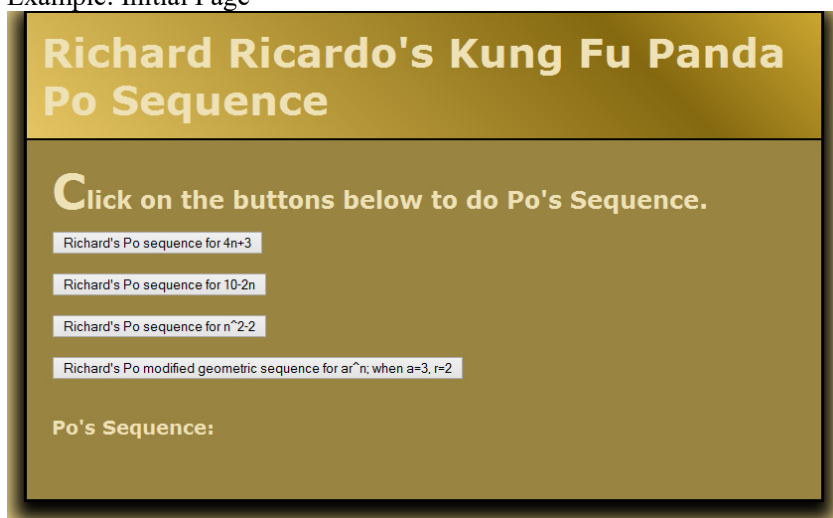


**Question 4** – JavaScript Chapter 4 & 5 (25 points)                              **Estimated time: 3 hours**
- Save question 4 files in subfolder "**lastname_firstname_assignment5\q4\**".  (-20 points if no JavaScript)
- Create a web page that displays the default information (example shown).     (1 point each, total 4 points)
- The initial page and related outputs should look like the examples shown below.
- Create your page using "**<your name>**'s Kung Fu Panda Po Sequence**" as the page title. Save the page as **index.htm**. Document the html file with html and JavaScript comments.     (1 point each, total 3 points)
- Allow the user to click on one of the four buttons.                    (4 points each for logic, total 16 points)
    o   You can (must) choose to use **for** loop, **while** loop or **do..while** loop.
    o   The sequences generated and the output should look like the example output shown. (1 point each for output, total 4 points)
- Create a css file named **style.css** to format index.htm by creating your own layout (no two students should have the same layout). Use css comments to document the css program. You can use **the same (or similar) css file(s)** to format all questions.                              (1 point each, total 2 points)

Example: Initial Page

Example: Output

When button 1 is clicked



When button 2 is clicked



When button 3 is clicked



When button 4 is clicked



**Important:**
1. If you do not put **<your name>** / **<your first name>** in the above mentioned fields (as shown in the examples), you will get **0 points** for the question(s).
2. **No two students** should submit webpages with exactly the same cod, or the content, or same layout, or same color combination. If found, both students will get **0 points**.
3. When you view page source in a web browser, `<!DOCTYPE html>` must be at the top of every page. In other words, all pages must be written in HTML5. **(-20 points** if not)
4. All html files must pass html validation at http://validator.w3.org/ without any **error/warning** (with only 2 warnings). Use the validator's "File Upload" tab to check each file. **(-2 points** for each error/warning, **2 warnings allowed**)
5. All css files must pass css validation at http://jigsaw.w3.org/css-validator/ without any **error/warning**. **(-2 points** for each error/warning)

6. If your html file contains any css component, your html file must pass both html validation (3 above), and css validation (4 above) without any error.
7. If your files do not pass the validations, **2 points will be deducted** for **each error** (and each JavaScript warning) found.
8. Document (comment) your html files (`<!-- -->`) , css files (`/* */`), and JavaScript files (`/* */`). **(-1 point** for each file with insufficient comments)

**Submission instructions:**
- You need to test the above document(s) in your web browser.
- Do screen capture(s) of the **initial page** and the related **output(s)**. Use any graphic editing software (e.g. Microsoft Paint, Adobe Fireworks, GIMP, or Microsoft Expression Design etc) to cut out the browser output (from the screen capture), paste them into a word document.
- For this assignment, you only need to do screen capture(s) of the **initial page** and the related **output(s)**, you do not need to do screen capture(s) of the input pages. Provide **2 different test cases** for each question. In other words, for **each question**, you need to have **1 initial page** screen capture and **2 related output(s)** screen captures. (-50 points for no test cases, -5 points for only 1 test case)
- Do screen capture(s) of html validation results and css validation results, cut and paste them into the word document. You do not need to do screen capture(s) of JavaScript Lint validation results.
- Save the word document as a pdf file.

You need to submit the following:
1. A pdf file containing the screen capture(s) of the web browser output (all html pages) and the screen capture(s) of all html validation results (from http://validator.w3.org/), and css validation results (from http://jigsaw.w3.org/css-validator/), name the file **lastname_firstname_assignment05.pdf**.
2. All html file(s), css file(s), and other related files (e.g. image files). Zip your file folder (lastname_firstname_assignment5) into a single zip file (or rar file) **lastname_firstname_assignment05.zip**.
In the above example, the zip file should contain the following files and subfolders. If there is any image, there should be a \images\ subfolder.
- lastname_firstname_assignment5\q1\index.htm
- lastname_firstname_assignment5\q1\style.css
- lastname_firstname_assignment5\q2\index.htm
- lastname_firstname_assignment5\q2\style.css         // you may put style.css in a subfolder
- lastname_firstname_assignment5\q3\index.htm
- lastname_firstname_assignment5\q3\style.css
- lastname_firstname_assignment5\q4\index.htm
- lastname_firstname_assignment5\q4\style.css
Please show the above mentioned **two files**: .pdf and .zip to your camp instructor.