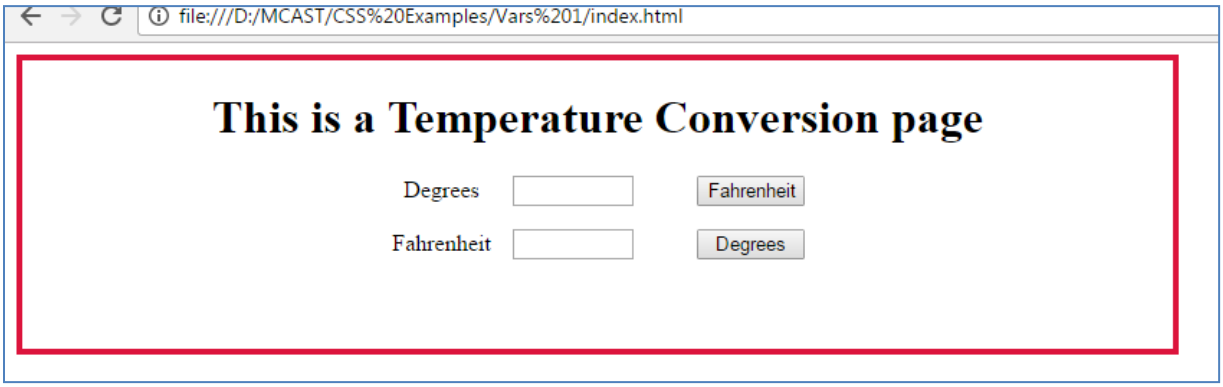
Worksheet 5: Variables

1. You are required to create a web page which is able to convert from Degrees Celcius to Fahrenheit.



a) You need to create a layout similar to the above picture.

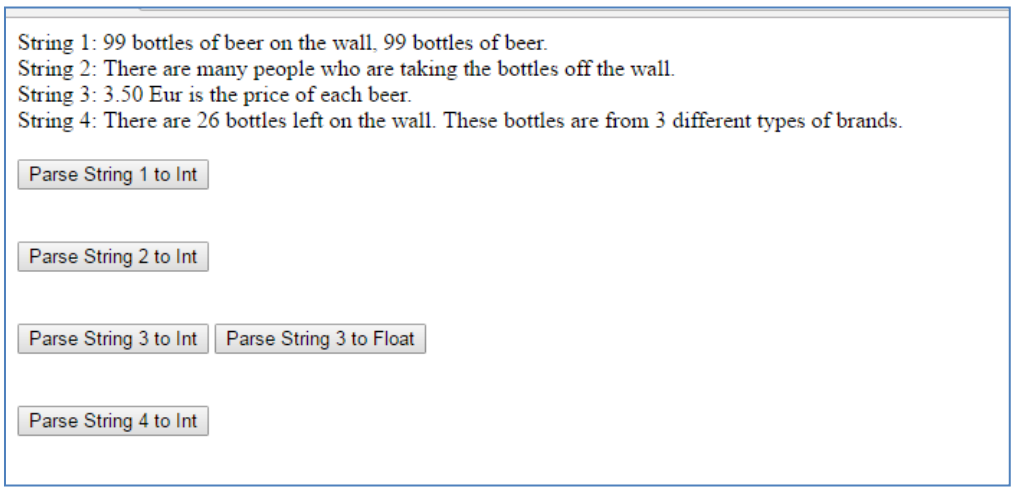
b) The user is allowed to either input a value in Degrees Celcius or Fahrenheit.

c) Once the user clicks on the *Fahrenheit* button, a function should extract the value in the *Degrees* text box and convert it to Fahrenheit. The calculated value is to be displayed in the *Fahrenheit* text box.

d) You need to implement the same functionality for the conversion from Fahrenheit to Degrees.

e) Validation is not required at this stage.

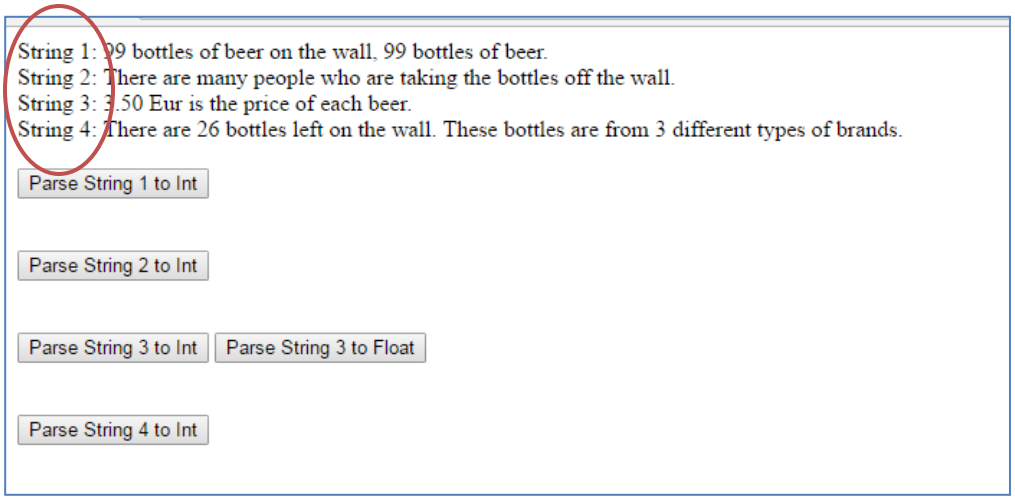
2. In this exercise you are required to use the built-in functions *parseInt()* and *parseFloat()* in order to parse a set of strings:



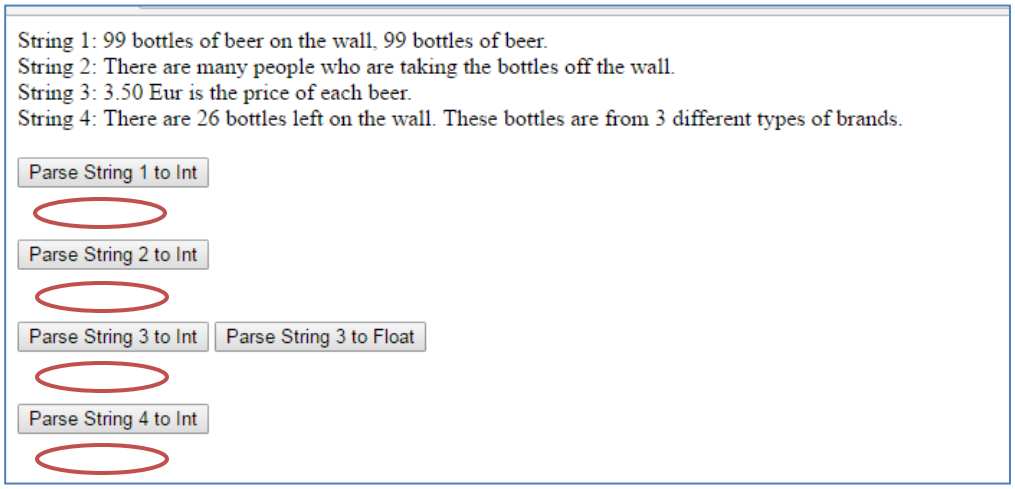
a) Before you implement the above, answer the following questions:
   i. What answer will be achieved after parsing string 1 to integer?
   ii. What answer will be achieved after parsing string 2 to integer?
   iii. What answer will be achieved after parsing string 3 to integer?
   iv. What answer will be achieved after parsing string 3 to float?
   v. What answer will be achieved after parsing string 4 to integer?

b) The 4 different strings need to be added to the webpage as it loads. This is because the different strings need to be saved as variables.

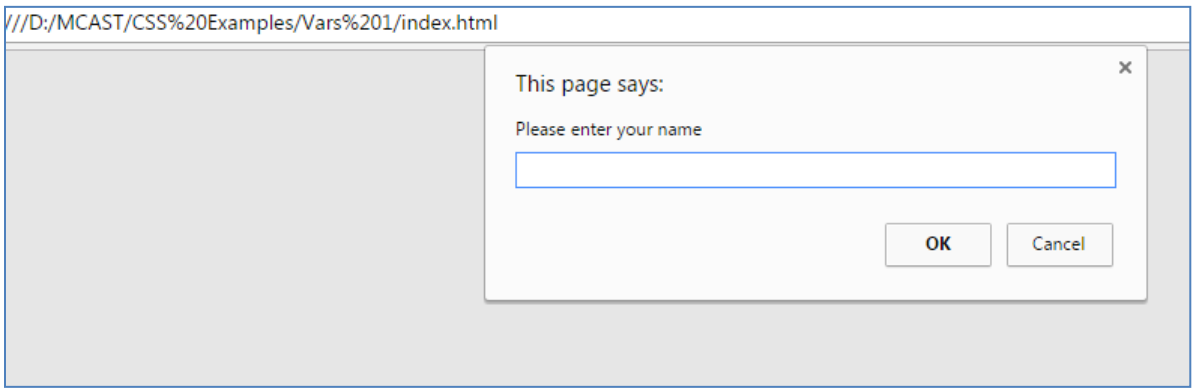
c) The marked text can be written in the HTML code:



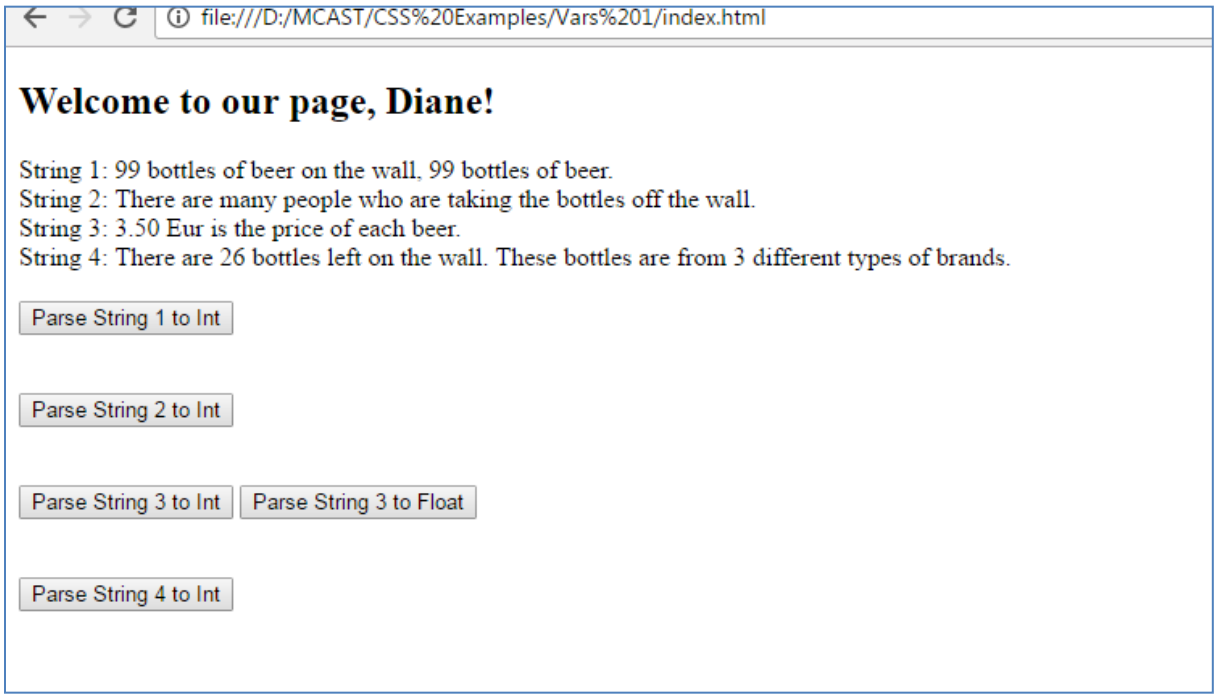
d) Every button needs to parse the corresponding string. The result should be displayed in the marked space:



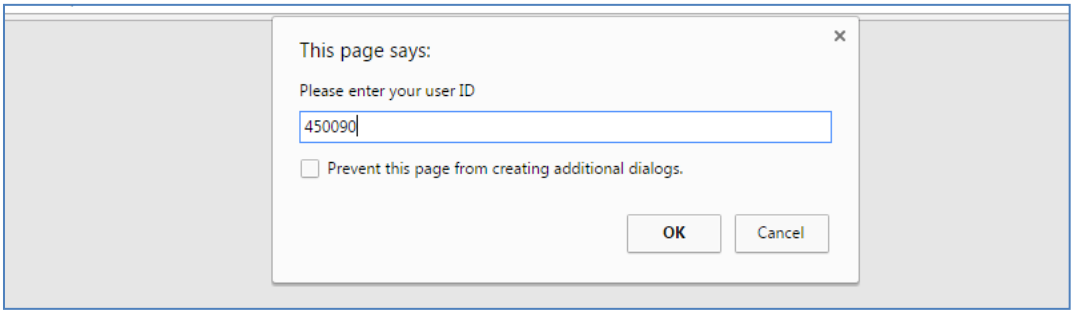
3. Edit the previous web page so that when the user accesses the page, a dialogue asking for the user's name is displayed:



A welcome message, using the user's name, is then shown on the page:

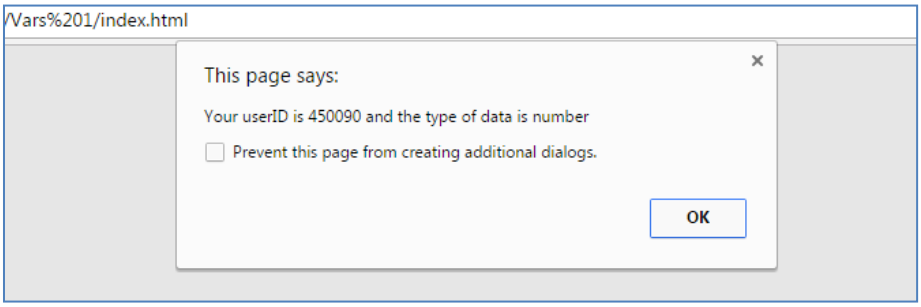


4. Edit the previous web page so that after the page asks for the user's name, it then asks for the user ID.



5. Since the user ID value is aquired as string, you need to convert the value to integer.

   To ensure that the user ID has been converted properly, use call the alert function so as to display the inserted user ID along with its type:



6. Make sure that the user ID is also displayed in the welcome message.

7. Type Conversion

a) What is the difference between implicit and explicit conversion?

b) Give an example of an explicit conversion implemented for this worksheet.

c) Give an example of an implicit conversion implemented for this worksheet.