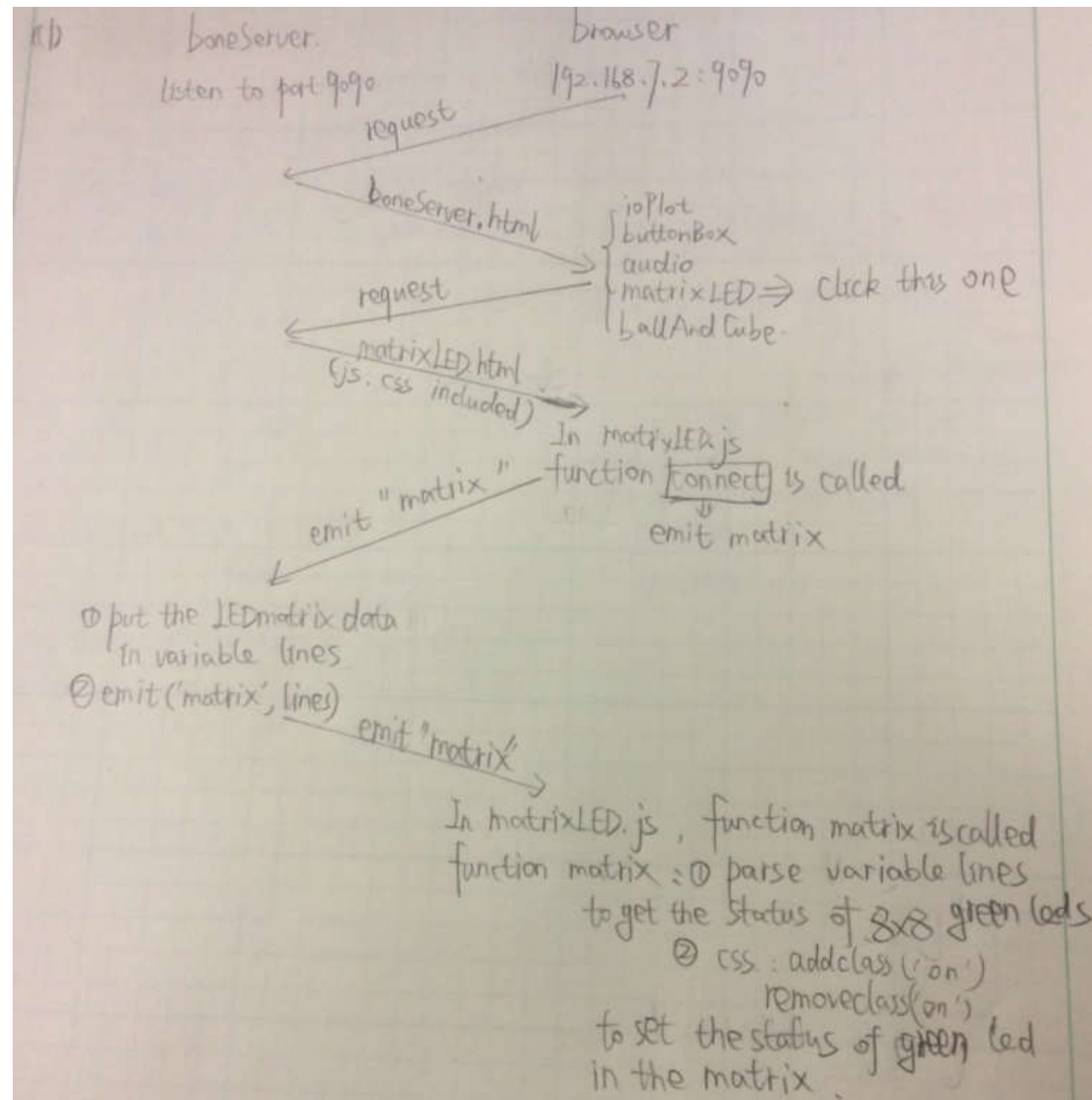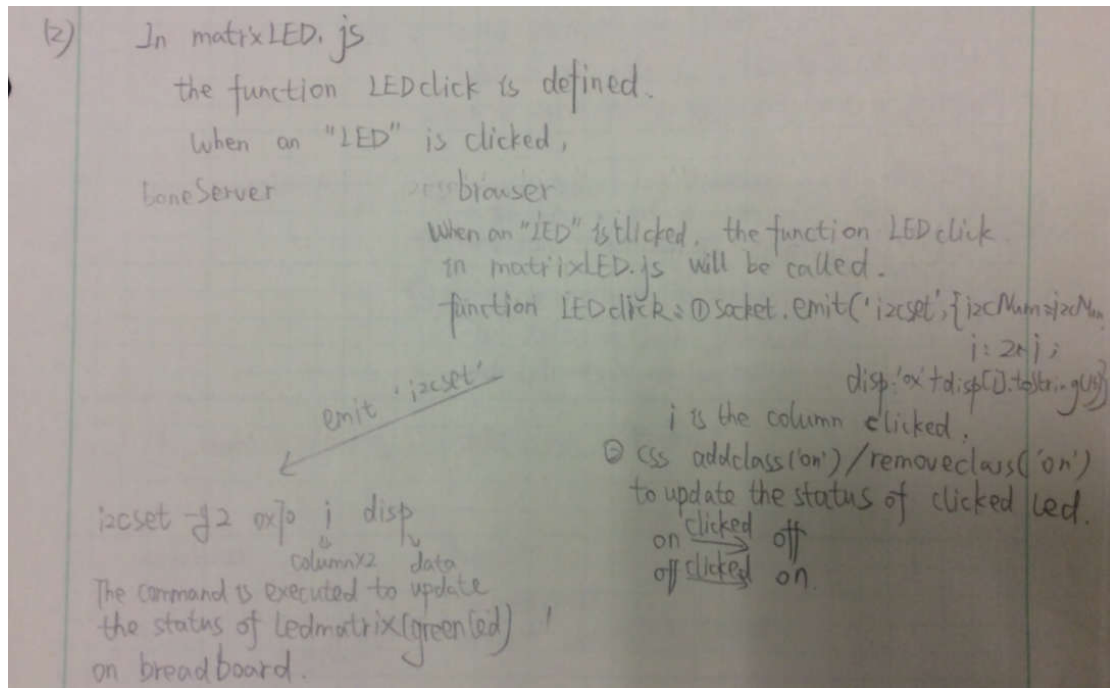MatrixLED

1. Before writing any code, write a paragraph describing how boneServer.js and the browser interact in the given example. For example, in matrixLED.js connect() is called to make a connection between the browser and the bone. The message "matrix" is sent to the bone. What happens in response to the message?

2. What happens when an "LED" is clicked on in the browser?

(2)   In matrixLED. js
      the function LEDclick is defined.
      When an "LED" is clicked,

Bone Server   browser
                    When an "LED" is clicked, the function LEDclick
                    in matrixLED.js will be called.
                    function LEDclick = ① socket.emit('i2cset',{i2cNum:i2cNum
                                                                i:2*j;
                                      disp:'ox'+disp().toString.gth))
              'i2cset'   i is the column clicked.
      emit   ② css addclass('on')/removeclass('on')
                             to update the status of clicked led.
                                on clicked off
                                off clicked on.
i2cset -j2 0×0 i disp
       Column×2 data
The command is executed to update
the status of ledmatrix(green led)
on breadboard.

3. What entry in matrix.css is used to color the LED?
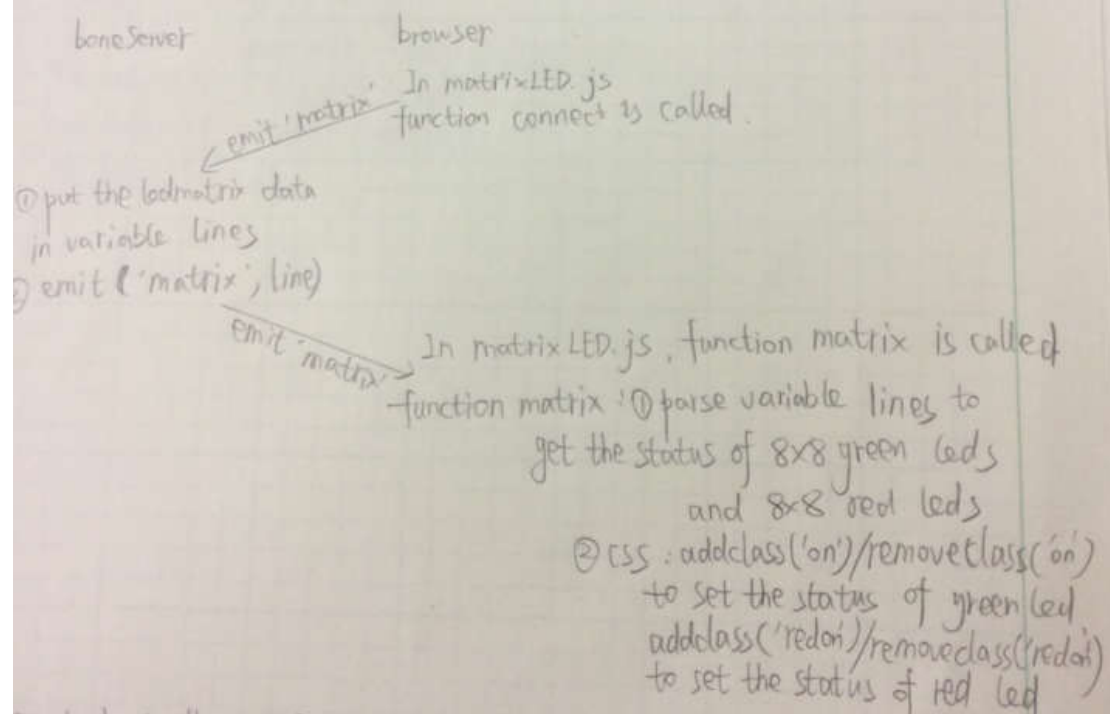The class led gives a background color which is white.
The class on gives a color of green.
.
4. Write a high level paragraph about how you will control the two LEDs. What messages will be sent between the browser and the bone?
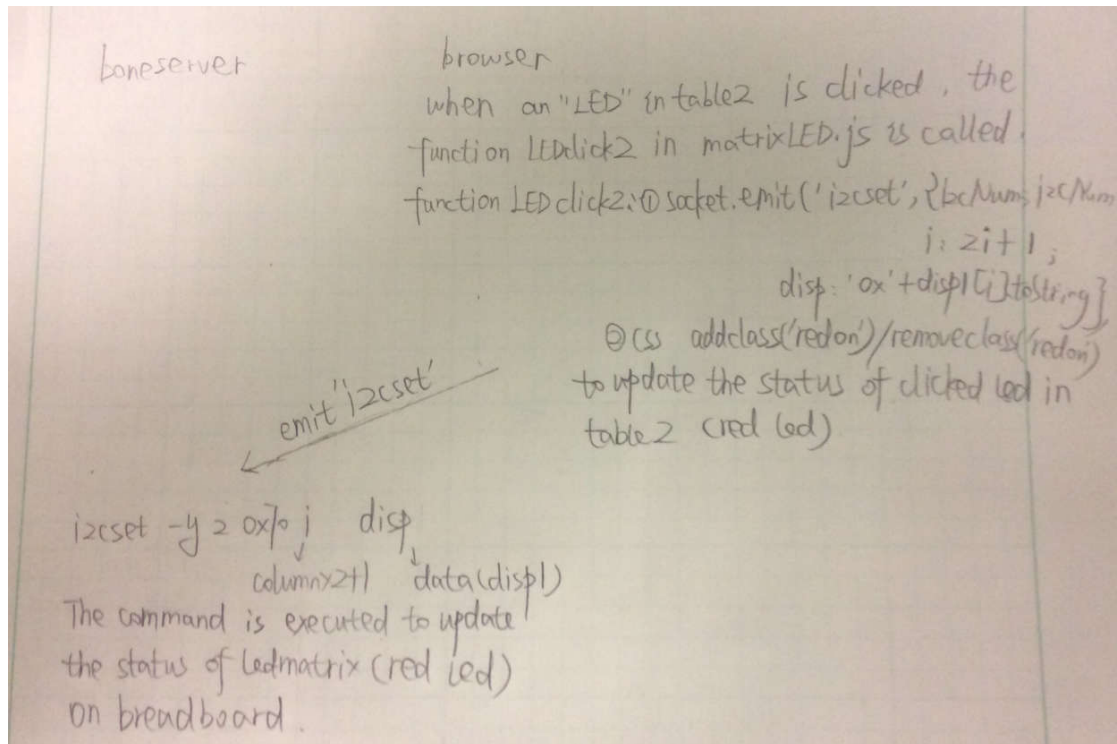
In matrixLED.html : add element of table2
                    table 2 is another 8×8 table,
                    which is used to control the red ledmatrix

In matrixLED.js : ① matrixData2 is added with 8×8 td.
                    ∴ The data is put in table2
                  ② function LEDclick2 is added to control table 2
                  ③ function matrix is changed to initialize
                     the status of both green ledmatrix and
                     red ledmatrix in matrixLED.html

In matrixLED.css : add class 'redon'

boneServer   browser
                              In matrixLED.js
              emit 'matrix   function connect is called.
① put the ledmatrix data
in variable lines
② emit ('matrix', line)

              emit   In matrix LED.js , function matrix is called
                matrix   function matrix : ① parse variable lines to
                              get the status of 8×8 green leds
                                       and 8×8 red leds
                            ② css : addclass('on')/removeclass('on')
                                     to set the status of green led
                                     addclass('redon')/removeclass('redon')
                                     to set the status of red led

LEDclick is the same.
LEDclick2 is added.

boneserver

browser

when an "LED" in table2 is clicked, the
function LEDclick2 in matrixLED.js is called.
function LED click2: ① socket.emit('i2cset', {bcNum; i2cNum
i: zi+1;
disp: 'ox'+displ[i].toString}
② css addclass('redon')/removeclass('redon')
to update the status of clicked led in
table2 (red led)

emit 'i2cset'

i2cset -y 2 ox/o j disp
column×2+1 data(displ)
The command is executed to update
the status of ledmatrix (red led)
on breadboard.

5. Write your code. Do you need to change boneServer.js? (I don't think so.) Customize the html to have your name on it, etc.