# Practice exercises for mouse and list methods

Help Center

Solve each of the practice exercises below. Each problem includes two CodeSkulptor links; one for a template that you should use as a starting point for your solution and our solution to the exercise.

1. For each mouse click, print the position of the mouse click to the console.

   Mouse echo template
   Mouse echo solution
   Mouse echo (Checker)

2. Modify the program template below so that clicking inside any of the three displayed circles prints the color of the clicked circle to the console. Hint: Use the supplied function `dist` to compute the distance between the center of each circle and the mouse click.

   Circle click template
   Circle click solution
   Circle click (Checker)

3. Write a function `day_to_number(day)` that takes the supplied global list `day_list` and returns the position of the given day in that list. You can either use the Docs to locate the appropriate list method or write a `for` loop to implement this function.

   Day lookup template
   Day lookup solution
   Day lookup (Checker)

4. Write a function `string_list_join(string_list)` that takes a list of strings as input and returns a single string that is the concatenation of the lists in the string. We recommend using a `for` loop to implement this function.

   String list join template
   String list join solution
   String list join (Checker)

5. Complete the given program template to produce a program that fills the canvas with a 10x10 grid of touching balls of the given size. You should use two `for` loops, one nested inside the other, placed in the draw handler.

   Ball grid template
   Ball grid solution
   Ball grid (Checker)

6. **Challenge:** Write a program that draws a polyline (an open polygon) based on a sequence of mouse clicks. The first click should create a point. Subsequent clicks should add a new segment to the polyline. You should include a “Clear” button that deletes the polyline and restarts the drawing process.

   Polyline template
   Polyline solution
   Polyline (Checker)

Created Wed 15 May 2013 11:42 AM PDT

Last Modified Mon 18 May 2015 2:22 PM PDT