

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](#)

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](#)

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](#)

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](#)

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](#)

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](#)