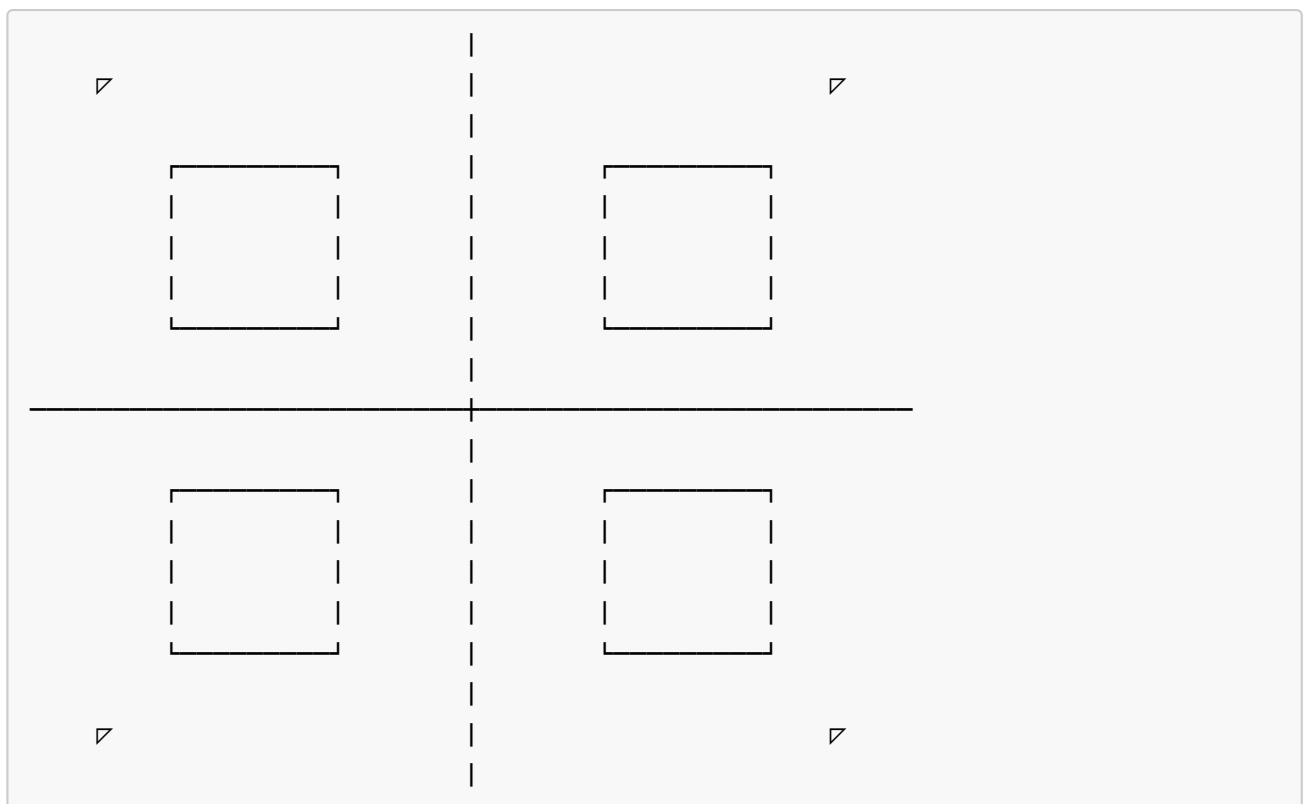


# Initial RBT Frontend Interview Test Questions

**NOTE:** Use HTML5, CSS3 and pure JavaScript (without jQuery). Everything should work in current versions of Chrome, Firefox and Internet Explorer.

1. Make HTML page with single 50x50px element which follows mouse cursor by applying following rules:
  - divide window in four quarters: top-left, top-right, bottom-left and bottom-right,
  - element should be tracking the cursor, but shifted 20px by X and Y axis toward the center of the screen, based on the quarter in which is the mouse cursor. Example:



2. Make HTML page that fetches data from <http://jsonplaceholder.typicode.com/photos> using AJAX and displays list of items with `title`, `url` and `thumbnail image`.
3. Make HTML page with textbox and list of US countries:
  - you can use data from <https://gist.github.com/mshafrir/2646763>,
  - when user starts typing in textbox, filter the list of countries, and display only countries that contain entered text. E.g. user enters 'sas', list should display 'Kansas' and 'Arkansas',
  - if user clicks element from list, alert should be displayed with country abbreviation. E.g. user clicks on 'Kansas', alert displays 'KS'.
4. Make HTML page that demonstrates multiplication of matrices, page should:

- contain two textboxes which accepts matrices in format `[[11,12,13],[21,22,23],[31,32,33]]` (the matrix array of row arrays),
- validate input data, and notify user if there is an error.
- have button that multiplies matrices and presents the result in 3rd read-only textbox in same format,

5. Use CSS3 animations and transitions to create HTML element which:

- rotates around X-axis on click,
- fades in and fades out on mouse scroll,
- you can consult <https://developer.mozilla.org/en-US/docs/Web/Guide/CSS/UsingCSStransitions> to learn more information about CSS transitions.