Instructions

1. Please submit the solution in running state.
2. Please upload pretty (non-minified) version of .js, .css, .html and .json files and avoid uploading **node_modules** folder**.**

Questions

1. *Write a function that takes string as input and returns count of each character in an object*.

   Input - "Smart Operations & Edge Computing Platform"
   Output - {'S': 1, 'm': 3, 'a': 3, 'r': 3, 't': 4, ' ': 5, 'O': 1, 'p': 2, 'e': 2, 'i': 2, 'o': 3, 'n': 2, 's': 1, '&': 1, 'E': 1, 'd': 1, 'g': 2, 'C': 1, 'u': 1, 'P': 1, 'l': 1, 'f': 1}

2. *Write a function that takes a city name as input and returns state name as output from the following data structure -*
   obj = {

        "India" : {

           "Karnataka" : ["Bangalore", "Mysore"],

           "Maharashtra" : ["Mumbai", "Pune"]

        },
        "USA" : {

           "Texas" : ["Dallas", "Houston"],

           "IL" : ["Chicago", "Aurora", "Pune"]

        }

      }

   Input - "Pune"
   Output - ["IL", "Maharashtra"]

3. Choose any one -

   For Nodejs/backend developers :-

   Make a GET request to https://restcountries.eu/rest/v2/lang/es and store the response in a file.
   Add a retry logic if the request fails for some reason.
   For retrying **-** Use asyncjs library or implement it yourself.
   For GET request choose any of the following -

i. superagent (https://github.com/visionmedia/superagent)
ii. request (https://www.npmjs.com/package/request)
iii. got (https://www.npmjs.com/package/got)
Use app.js as the starting point of project.

For UI/frontend developers only :-

Design a simple form containing name, email and password as input fields. Add input field validation. Send the entered data as json using ajax call to https://httpbin.org/post and then display the response. Add a retry logic if the request fails for some reason.
For retrying - Use asyncjs library or implement it yourself.
For AJAX call choose any of the following -
i. superagent (https://github.com/visionmedia/superagent)
ii. JQuery
Use index.html as the starting point of project.

NOTE :-

1. If you are giving multiple solutions please mention which one would you prefer and why.