1. Design a webpage for an online Pizza Delivery system using HTML5. (2marks)

2. Develop an online COVID-19 tracker using HTML and JavaScript. Design the web page with three textboxes to fetch the number of newly infected cases on a particular day corresponding to three states. Create a button to add the count to the existing cases of the three states. Use DOM property event handling to update the count when the button is clicked and alert which state has maximum cases for every submission of the button. The total number of cases could be the same for any two or all the three states. In such case it should alert the name of all the states with similar count. Both name and count must be displayed. (2 marks)

3. Develop an online application for Indian Premier League – 2021 Auction Process using HTML, JavaScript and DOM. The application is an editor for IPL auction result for Chennai Super Kings. The webpage has a heading section with heading “IPL Auction 2021”. Create a button “EditDate” that appends current date to the heading using TextNode method. The webpage also has three <div> sections for player list, newly added batsmen and dropped bowler. Fetch the current set of players from a textbox and add it to the first <div> as a child element using <p> tag when “Add Player” button is clicked. Assume in second <div> there is an unordered list of two batsmen who are to be replaced. Fetch the names of the two new batsmen from two textboxes and on clicking “Replace batsmen” button, replace the previous two batsmen from the unordered list. Assume that the third <div> has an unordered list of 3 bowlers in descending order of performance. Create a button “DropBowler” that deletes the last bowler in the list.  (3 marks)

4. CMF Hospital wants you to develop an online application to analyze the cognitive ability of geriatric patients using HTML and JavaScript. To analyze the cognitive ability a simple online test is done to determine memory and basic problem solving skills. Design the web from of the analyzer and implement validations as follows:

* Design a form with 8 textboxes, 8 div (for displaying error messages) and a button. The patient has to enter details in the form.
* The entries in the textbox is as follows:
* Textbox 1 = name
* Textbox 2 = number of brothers of patient + 2
* Textbox 3 = Textbox 2 value X 2
* Textbox 4 = Textbox 3 value + 1
* Textbox 5 = Textbox 4 value X 5
* Textbox 6 = Textbox 5 value + number of sisters the patient has
* Textbox 7 = Number of brothers the patient has
* Textbox 8 = Number of sister the patient has
* Textboxes from 3 to 5 must hold the correct numeric value corresponding to the operation specified. Incase case of error an error message must be displayed in the corresponding <div>. As long as valid entry is given in any textbox the focus must remain in the textbox.
* To check the ability of the patient deduct 25 from the value in the sixth textbox. If the difference is a two digit number then the first digit is the number of brothers and second digit is the number of sisters. If the difference is one digit non-zero value then the number of sisters is the one digit difference value and the number of brothers is zero. If the difference is zero then the patient has no brothers and sisters.
* Validate the derived count of brothers and sisters from previous step with the values entered 7th and 8th textboxes. If it is a match set the div next to 8th textbox as “Good memory and problem solving skills” else “Retardation is memory and problem solving skills”.

For example:

If I have 1 brother and 0 sister then

* Textbox 2 = 1 + 2 = 3
* Textbox 3 = 3 X 2 = 6 (Validate that correct product is entered here)
* Textbox 4 = 6 + 1 = 7 (Validate that correct sum is entered here)
* Textbox 5 = 7 X 5 = 35 (Validate that correct product is entered here)
* Textbox 6 = 35 + 0 = 35 (35-25=10) So no of brothers (first digit) - 1 and no of sisters (second digit) - 0
* Textbox 7 = Number of brothers the patient has
* Textbox 8 = Number of sister the patient has

If 7th textbox has 1 and 8th textbox is 0 then the div text is “Good memory and problem solving skills” else “Retardation is memory and problem solving skills”.

Note: Assume maximum number of brothers is 5 and maximum number of sisters is 5. (3 marks)