1. List 5 difference between Browser JS(console) v Nodejs.

   - JS must be run with help of browser whereas Nodejs doesn't required browser to run.

   - JavaScript is a programming language that is used for writing scripts on the website. NodeJS is a JavaScript runtime environment.

   - JS is basically used on the client side whereas Nodejs is used on the server side.

   - JavaScript is capable enough to add HTML and play with the DOM whereas Nodejs does not have capability to add HTML tags.

   - JavaScript can run in any browser engine as like JS core in safari and Spider monkey in Firefox whereas Nodejs is used in server-side development.

   - JavaScript is used in frontend development. Nodejs is used in server-side development.

2. watch & summary 5 points -

   https://www.youtube.com/watch?v=SmE4OwHztCc&ab_channel=JSConf

   - This video explains about how browser renders a website. A lot process happen behind the screen. When user enters website name in the browser, it will fetch a html file. But browser didn't understand the html code.so html parser is needed.

   - What happens when html file is fetched by the bowser: actually, parser will parse the html code into DOM(Data Object Module) tree, because browser can understand the DOM tree structure. Simultaneously CSS parser will convert the CSS code into CSSDOM tree.

   - In depth, HTML code is fed into the tokenizer, it takes every text of html and assign a token to every text. It identifies every open and close tag in html. After tokenizing it will be easy to construct the DOM tree. Then

script in the HTML will execute and send the JS code into tokenizer to assign the token and construct the DOM tree. This cycle repeats.

- Some situations will be there where delaying of parsing the HTML may happen they are network latency, it means while parsing the HTML it hits a non-new line script then it has to pause and fetch the script for your network and it has to execute it. And link and style also can halter the JS execution.

- Both HTML and CSS DOM tree combines to form Render tree , it has multiple trees, render objects, render styles, render layers, line boxes. Using this render tree layout of the page is designed. Its layout the pattern of the page. Finally give colors , better visual representation to your page.

3. Execute the below code and write your description in txt file
    a. typeof(1)

       type of 1 is Number.
    b. typeof(1.1)

       type of 1.1 is Number.
    c. typeof('1.1')

       typeof '1.1' is string.
    d. typeof(true)

       typeof(true) is Boolean.
    e. typeof(null)

       typeof(null) is object.
    f. typeof(undefined)

       typeof undefined is undefined.

g. typeof([])

   type of [] is object.

h. typeof({})

   type of ({}) is object.

i. typeof(NaN)

   type of NaN is Number.