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

| S.No | JavaScript | NodeJS |
| --- | --- | --- |
| 1. | JavaScript is a programming language that is used for writing scripts on the website | NodeJS is a JavaScript runtime environment. |
| 2. | JavaScript can only be run in the browsers. | We can run JavaScript outside the browser with the help of NodeJS. |
| 3. | It is basically used on the client-side. | It is mostly used on the server-side. |
| 4. | JavaScript is capable enough to add HTML and play with the DOM. | Nodejs does not have capability to add HTML tags. |
| 5. | JavaScript can run in any browser engine as like JS core in safari and Spider monkey in Firefox. | V8 is the JavaScript engine inside of node.js that parses and runs JavaScript. |
| 6. | JavaScript is used in frontend development. | Nodejs is used in server-side development. |
| 7. | Some of the JavaScript frameworks are RamdaJS, TypedJS, etc. | Some of the Nodejs modules are Lodash, express etc. These modules are to be imported from npm. |
| 8. | It is the upgraded version of ECMA script that uses Chrome’s V8 engine written in C++. | Nodejs is written in C, C++ and Javascript. |

1. watch & summary 5 points -<https://www.youtube.com/watch?v=SmE4OwHztCc&ab_channel=JSConf>

* Parsing the HTML Tags by validating the HTML tags by the process of tokenizer.
* Parsing the CSS styles and render the frame tree
* Render the objects, styles and layouts
* Nan-visual elements are head,script and title
* Combine all styles including inline, internal and external style sheets
* Layout batch changes and font changes
* Modern JS works internally
* Will create the paint setup
* Creates layouts from render object
* Produce the bitmap from render objects and bitmaps are created as rexure and texure will render the layout.
* It’s actually parsing the tags and styles into DOM tree and it’s converting into render tree.

1. Execute the below code and write your description in txt file

console.log(typeof 1); // number

console.log(typeof 1.1); // number

console.log(typeof "1.1"); // string

console.log(typeof true); // boolean

console.log(typeof null); // object

console.log(typeof undefined); // undefined

console.log(typeof []); // object

console.log(typeof {}); // object

console.log(typeof NaN); // number