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

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| 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. |
| 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
* DOM tree or Render tree(4 layers)
* Layout computes were a node will be on the screen
* Painting computes bitmaps and composites on the screen

PARSE HTML

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J S ----RENDER TREE----🡪LAYOUT----🡪PAINT

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PARSE CSS

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

The typeof operator returns a string indicating the data type of the unevaluated operand.

* 1. typeof(1)

Output: number--🡪 Number tries to parse things into numbers

* + 1. typeof(1.1)

Output: number-🡪 Number tries to parse things into numbers

* + 1. typeof(true)

Output: Boolean-🡪 Boolean() will convert values based on if they're truthy or falsy

* + 1. typeof(null)

Output: object

* + 1. typeof(undefined)

Output: undefined🡺 they are not defined as expected

* + 1. typeof([])

Output: object 🡪 array are considered as objects in java scripts

* + 1. typeof({})

Output: object

* + 1. typeof(NaN)

Output: number--🡪Despite being "Not-A-Number"

1. Read what is prototype

Prototypes are the mechanism by which JavaScript objects inherit features from one another