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

Solution:

| 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. | NodeJS code can be run outside the browser. |
| 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 Spidermonkey in Firefox. | Nodejs can only run in V8 engine of google chrome. |
| 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. |

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

Solution :

1.Rendering: Parsing , Layout, Painting etc

2. Platform

3.Javascript M

4.Speculative Parsing

5.Parsing Flow

1. .To read -<https://stackoverflow.com/questions/5641997/is-it-necessary-to-write-head-body-and-html-tags>

Solution: i have Read about HTML tags

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

* 1. typeof(1)
  2. typeof(1.1)
  3. typeof('1.1')
  4. typeof(true)
  5. typeof(null)
  6. typeof(undefined)
  7. typeof([])
  8. typeof({})
  9. typeof(NaN)

Solution:

1. typeof(1)

Solution: Number

b. typeof(1.1)

Solution: Number

c . typeof('1.1')

Solution: String

**d.** typeof(true)

Solution: Boolean

**e.** typeof(null)

Solution: Object

f. typeof(undefined)

Solution: undefined

g. typeof([])

Solution: Object

h .typeof({})

Solution: Object

i . typeof(NaN)

Solution: Number

5. Read what is prototype

Solution:

The prototype is **an object that is associated with every functions and objects by default in** JavaScript, where function's prototype property is accessible and modifiable and object's prototype property (aka attribute) is not visible. ... Every function includes prototype object by default.