**Zen Task-2 (20-july-2021) RM-2**

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

**Solution:**

**NodeJS**: NodeJS is a cross-platform and opensource JavaScript runtime environment that allows the JavaScript to be run on the server-side. Nodejs allows JavaScript code to run outside the browser. Nodejs comes with a lot of modules and mostly used in web development.

**JavaScript:** JavaScript is a Scripting language. It is mostly abbreviated as JS. It can be said that JavaScript is the updated version of the ECMA script. JavaScript is a high-level programming language that uses the concept of Oops, but it is based on prototype inheritance.

**Difference between Nodejs and JavaScript:**

|  |  |  |
| --- | --- | --- |
| **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 Spider monkey 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 |

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

**Solution:**

* **Parsing HTML**
  + **HTML is forgiving by nature**
  + **Valid HTML5=>Would output**
  + **Parsing flow**
  + **Tokenizer**
  + **Parse tree will interact with HTML and gives output as DOM trees**
  + **Speculative parsing**

1. To read -<https://stackoverflow.com/questions/5641997/is-it-necessary-to-write-head-body-and-html-tags>
2. Execute the below code and write your description in txt file
   1. typeof(1)=> **number**
   2. typeof(1.1) => **number**
   3. typeof('1.1') =>**string**
   4. typeof(true) =>**boolean**
   5. typeof(null) =>**object**
   6. typeof(undefined) =>**undefined**
   7. typeof([])=>**object**
   8. typeof({})=>**object**
   9. typeof(NaN)=>**number**
3. Read what is prototype?

**Solution:** Prototype is a simulation or sample version of a final product, which is used for testing prior to launch.