**JavaScript Marathon**

**Assignment 1**

**Q1)**

JavaScript is a scripting language used to develop web pages. Developed in Netscape, JS allows developers to create a dynamic and interactive web page to interact with visitors and execute complex actions. It also enables users to load content into a document without reloading the entire page

**Q2)**

**Client side:** means browser interaction with servers.

**​​ Server side:** mean servers sending the requested data to the browser**.**

**Q3)**

Node.js is a platform built on Chrome's JavaScript runtime for easily building fast and scalable network applications. Node.js uses an event-driven, non-blocking I/O model that makes it lightweight and efficient, perfect for data-intensive real-time applications that run across distributed devices

**Q4) Explain Scope in JavaScript**

A scope can be defined as the region of the execution, a region where the expressions and values can be referenced.

There are two scopes in JavaScript that are global and local:

****Global Scope:**** In the global scope, the variable can be accessed from any part of the [JavaScript](https://www.javatpoint.com/javascript-tutorial) code.

****Local Scope:**** In the local scope, the variable can be accessed within a function where it is declared.

**Q5) JavaScript is asynchronous or synchronous.**

JavaScript is an asynchronous and concurrent programming language that offers a lot of flexibility. It's single-threaded like sync, but also non-blocking like async. Although it's synchronous by nature, JavaScript benefits from asynchronous code

**Q6) JavaScript is Single-threaded or Multi-threaded.**

JavaScript is a single-threaded language

**Q7) Explain DOM in your own word.**

DOM stands for Document Object Model. It defines the structure of the HTML document and can be manipulated.

**\*\*\***