JavaScript assignment -1

1.Explain the use of JavaScript? (Or What you can do using a JavaScript)?

- JavaScript is a light weight object-oriented programming language that is used by several websites for scripting the webpages.

- JavaScript helps the users to build modern web applications.

- JavaScript is commonly used to dynamically modify HTML and CSS to update a user interface by the DOM API.

2.What is the difference between Client-side and Server-side?

Client-side	Server-side
>source code is visible to the user.	source code is not visible to the user.
>It runs on the user's computer.	It runs on the webserver.
>It usually depends on the Browser and its version.	in this any server side technol -ogy can be used & it does Not depend on client.
>It doesn't provide security For data.	it provides more security for Data.

>HTML, CSS, JavaScript are Used	PHP, Python, Java, Ruby are used.
>It reduces load on processing Unit of the server.	It surge the processing load On the server.
>used in web development.	Uses scripts to produce a Response for client request.

3.What is Nodejs?

Node.js is an open source, cross-platform, backend JavaScript runtime environment that runs on the V8 engine and executes JavaScript code outside a web browser, which was designed to build scalable network applications.

4.Explain Scope in JavaScript?

Scope refers to the availability of variables and functions in certain parts of the code. In JavaScript, a variable has two types of scope:

- Global scope
- Local scope

Global scope: A variable declared at the top of a program or outside of a function is considered a global scope variable.

Ex://program to print a text

```
let a =" hello";

function greet ()

{

Console.log(a);

}

greet (); //hello
```

Local scope: A variable can also have a local scope i.e., it can only be accessed within a function.

Ex://program showing local scope of a variable

```
let a =" hello";

function greet ()

{

    let b=" world"

    console.log(a+b);

}

greet ();

Console.log(a+b);
```

5.JavaScript is asynchronous or synchronous?

JavaScript is Synchronous. If you're executing a JavaScript block of code on a page then no other JavaScript on that page will currently be executed.

6.JavaScript is single -threaded or multi-threaded?

JavaScript is Single threaded means that one command is being executed at a time.

7.explain DOM in your own word?

DOM: defines a standard for accessing document.

DOM (document object model) is platform and language neutral interface that allows programs and scripts to dynamically access and update the content,structure,and style of a document.