**JavaScript Variable**. **Variable** means anything that can vary. **JavaScript** includes **variables** which hold the data value and it can be changed anytime. **JavaScript** uses reserved keyword var to declare a **variable**. ... You can assign a value to a **variable** using equal to (=) operator when you declare it or before using it.

Variables declared **Locally** (inside a function) have **Function Scope**.

Variables declared with the var keyword can not have **Block Scope**.

Variables declared inside a block **{}** can be accessed from outside the block

Variables declared with the let keyword can have Block Scope.

Variables declared inside a block **{}** can not be accessed from outside the block:

**between** them is that **var** is function scoped and **let** is block scoped. It can be said that a variable declared with **var** is defined throughout the program as compared to **let**.

Local **scope** can be divided into **function scope** and **block scope**.

Redeclaring a variable using the var keyword can impose problems.

Redeclaring a variable inside a block will also redeclare the variable outside the block:

Redeclaring a variable using the let keyword can solve this problem.

Redeclaring a variable inside a block will not redeclare the variable outside the block:

Variables declared **locally** (inside a function) have **Function Scope**.

Variables declared with the var keyword cannot have **Block Scope**.

Variables declared inside a block **{}** can be accessed from outside the block

Let, Const and var is a keyword that is used in java script and can used within the function scope.

//The let keyword can be re-declared and it works only in a block scope. The value that is assigned to the let keyword is being initialized but not equal to that value. In this case the value assigned is quotes. There are five arrays that are being assigned to quotes and it’s a single variable that is used to store different elements and it’s also a reference to multiple variable //

let quotes = [

{

quote: ' Things change. And friends leave. Life doesn\'t stop for anybody. ',

source: ' Stephen Chbosky ', /source is a property and has been assigned and the datatype is a ‘string’//

year: 1970, //year is a property and has been assigned and the datatype is a number or integer.//

citation: ' Good reads-https://www.goodreads.com/quotes ',

//citation is a property and has been assigned and the datatype is a ‘string’.//

tags: ' Inspirational ', //Tags

is a property and has been assigned and the datatype is a ‘string’.//

},

{

quote: ' Be yourself,everyone else is already taken. ',

source: ' Oscar Wilde ',

year: 1942,

citation: ' Good Reads-https://www.goodreads.com/quotes ',

tags: ' Humor ',

},

{

quote: ' Two things are infinite: the universe and human stupidity; and I\'m not sure about the universe. ',

source: ' Albert Einstein ',

year: 1955,

citation: ' Good reads-https://www.goodreads.com/quotes ',

tags: ' Humor ',

},

{

quote: ' The Way Get Started Is To Quit Talking And Begin Doing.',

source: '-Walt Disney ',

year: 2017,

citation: ' Goal Cast-https://www.goalcast.com/2017/06/06/walt-disney-quotes-awaken-dreamer-in-you/ ',

tags: ' Humor ',

},

{

quote: ' You can have data without information, but you cannot have information without data,',

source: '- Daniel Keys Moran',

year: 2011,

citation: 'Brainy Quote-https://www.brainyquote.com/quotes/daniel\_keys\_moran\_230911',

tags: ' Genius ',

}

];

// This function `getRandomQuote` stores and returns all my random quotes. JavaScript function Statement will declare a function. The function consists of one statement that says to return the parameter of the function.

function getRandomQuote(quotes) {

var randomQuotesNumber = Math.floor(Math.random() \* quotes.length);

var randomQuote = quotes[randomQuotesNumber]

return randomQuote;

}

// This function will generate a random color in the quotes background.So if the color is 0 to 255 it will read 256 because of binary

function randomRGB () {

return Math.floor(Math.random() \* 256)

}

/\*\*\*

I created the array of quote objects and name it `quotes`.

There are five arrays listed with various quotes array.

Each object has been assigned a `quote` and `source` property.

In addition, I added the `year` property to at least one object in the array.

Then in the end I used console.log () to test the code and it worked. I tested this code in google chrome and it work pretty well\*\*\*/

//Now I have added the auto\_refesh function, timer and timer1.//

function auto\_refresh()

{

var timer = setInterval(printQuote,3000); //I assigned timer to the set interval function and increased it to 3000 milliseconds delay

var timer1 = clearInterval(timer); // I assigned timer1 to the function clearInterval and this function clears the set interval setInterval() function.

}

//function for the printQuote will print out all the variables within the function scope

function printQuote() {

var randomQuote = getRandomQuote(quotes);

var message = " ";

var x = randomRGB();

var y = randomRGB();

var z = randomRGB();

var rbgColor = "rgb("+ x +","+ y +", "+ z +")";

message +=clears the interval which has been set by setInterval() function before that "<p class='quote'>" + randomQuote.quote + '</p>';

// This is the code is referenced from the HTML page and

message += "<p class='source'>" + randomQuote.source ;

//Added the If statement for citation, year and tags the If statement is part of the code

if (randomQuote.citation) {

message += "<span class='citation'>" + randomQuote.citation + "</span>";

}

if (randomQuote.year) {

message += "<span class='year'>" + randomQuote.year + "</span>";

}

if (randomQuote.tags) {

message += "<span class='tags'>" + randomQuote.tags + "</span>";

}

message += "</p>";

document.body.style.background = rbgColor;

document.getElementById('quote-box').innerHTML = message;

}

document.getElementById('loadQuote').addEventListener("click",printQuote,false);

printQuote();

clearInterval();

auto\_refresh();

// The program is done