JavaScript Assignments
Topics: Basics of JavaScript

Assignment 1

a) Write a JavaScript program to display the hello message along with the user name.

Description :
- Ask the user to enter the name and store that name in a variable.
- Using the document.write display hello user name in big bold letter surrounded by <h1> tag.
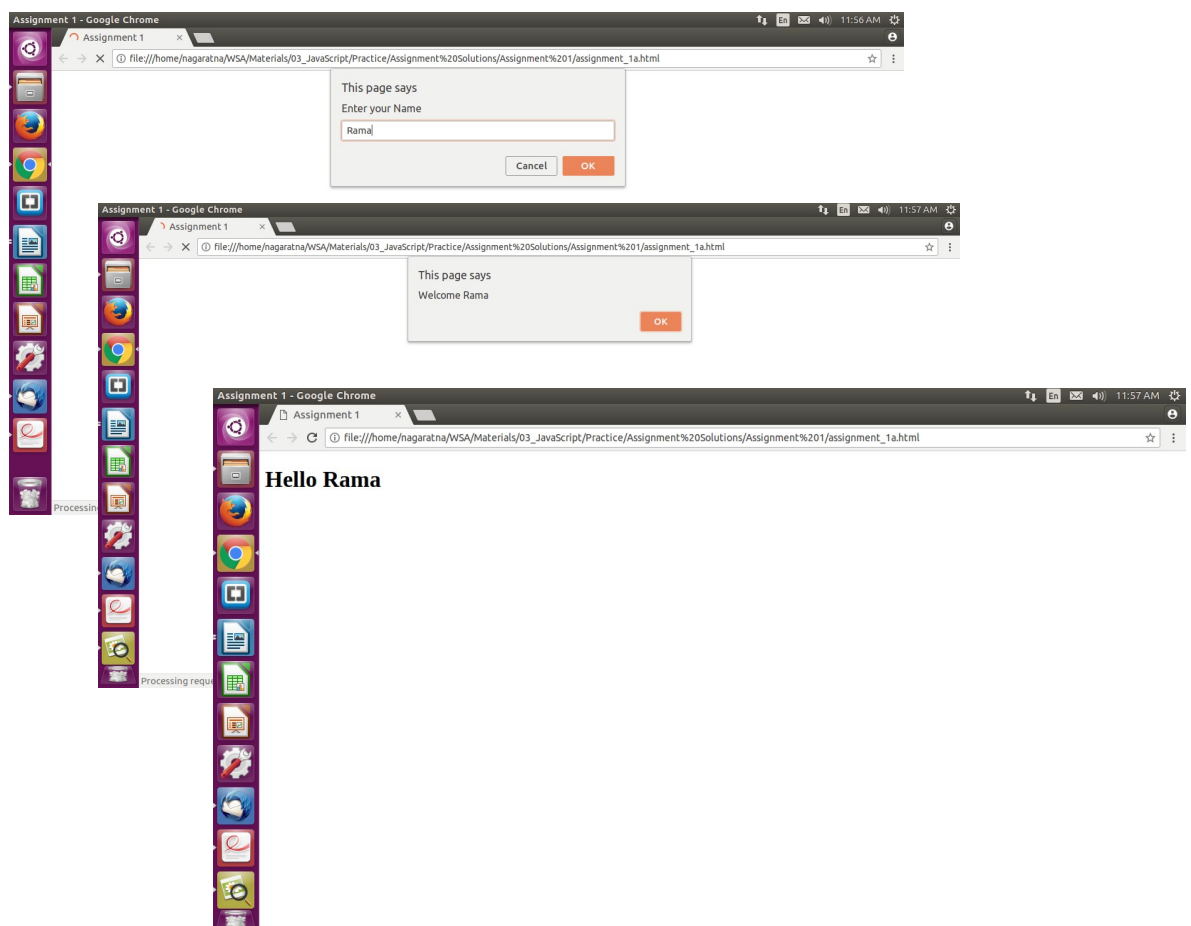- Also display the welcome username in alert message box.

Objective:
- To understand the basic concept of printing messages in html using javascript.

Prerequisites:
- Prompt
- Alert
- document.write

Sample Execution:
Test Case:

b) Write a JavaScript program to change the content of paragraph.

Description :
- Consider in html you have a paragraph e.g
  <p>This is paragraph </p>
- Your job is to replace the content to new one. e.g above paragraph should be replaced as "This is changed Paragraph".
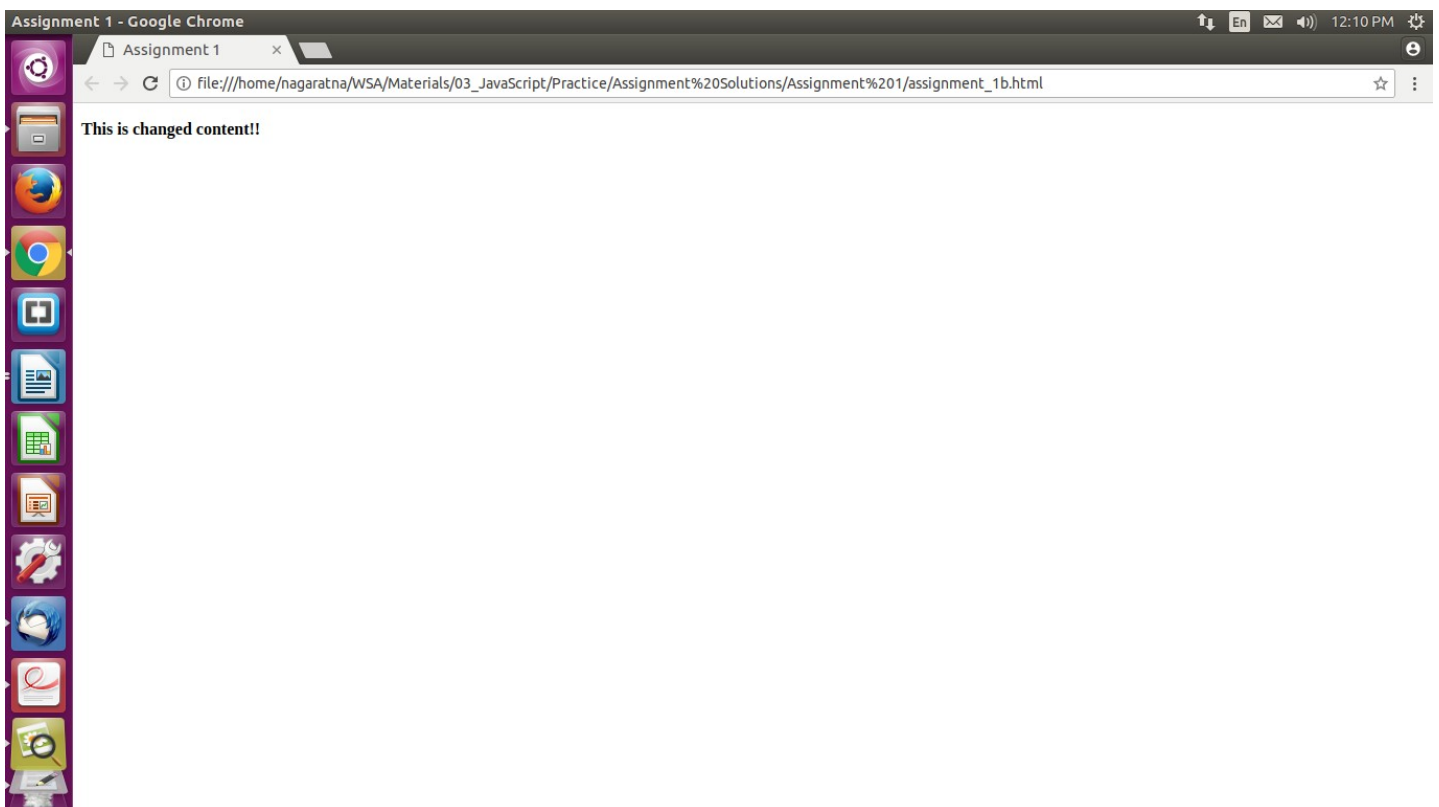
Objective:
- To understand the concept of document.innerHTML in javascript.

Prerequisites:
- innerHTML

Sample Execution:
Test Case:

c) Write a JavaScript program to find area of triangle where length of the 3 sides are given by the user.

Description :
- In the mathemetics area of triangle will be calculated as (when length of the 3 sides are given).

$$s = \frac{a+b+c}{2}$$

$$A = \sqrt{s(s-a) \times (s-b) \times (s-c)}$$

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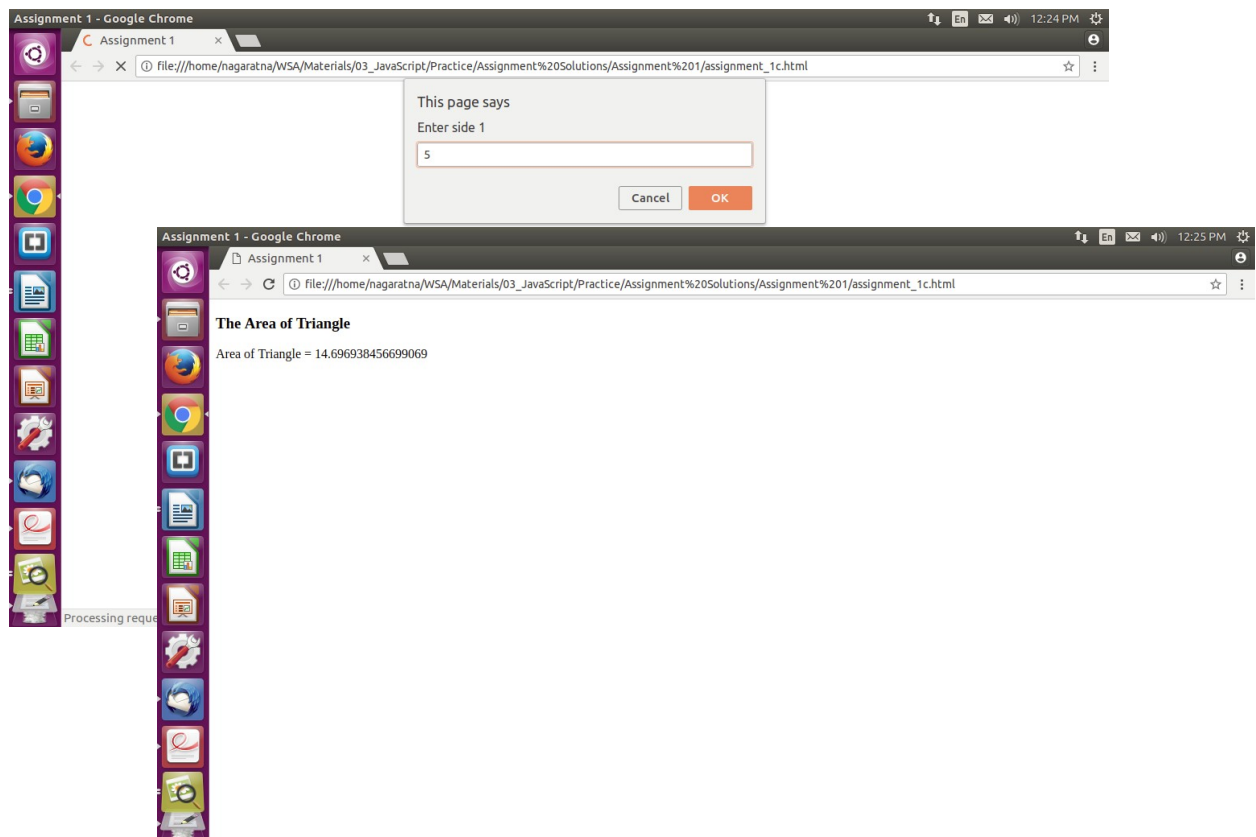
Where a,b, and c are the 3 sides.

Objective:
- To understand the concept of document.innerHTML in javascript.

Prerequisites:
- innerHTML

Sample Execution:
Test Case:

d) Write a JavaScript Program to find the gross salary of a employee.

Description :
- Ask user to enter the Employee Name, Id and Salary.

- Calculate the gross salary as

  gross salary= salary + ta +da

  consider, ta =15 % of salary

  da = 35 % of salary

Objective:
- To understand the concept of numbers and mathemeatic operations in javascript.

Prerequisites:
- Basic operators

Sample Execution:
Test Case:

e) Write a JavaScript prgram to convert the given temperature in Fahrenheit to Celsius using the following conversion formula: C = F-32 / 1.8.

Description :
- Program should demonstrate the conversion of temperature from fahrenheit to celcius.

- Fahrenheit to celcius is calculated by using,

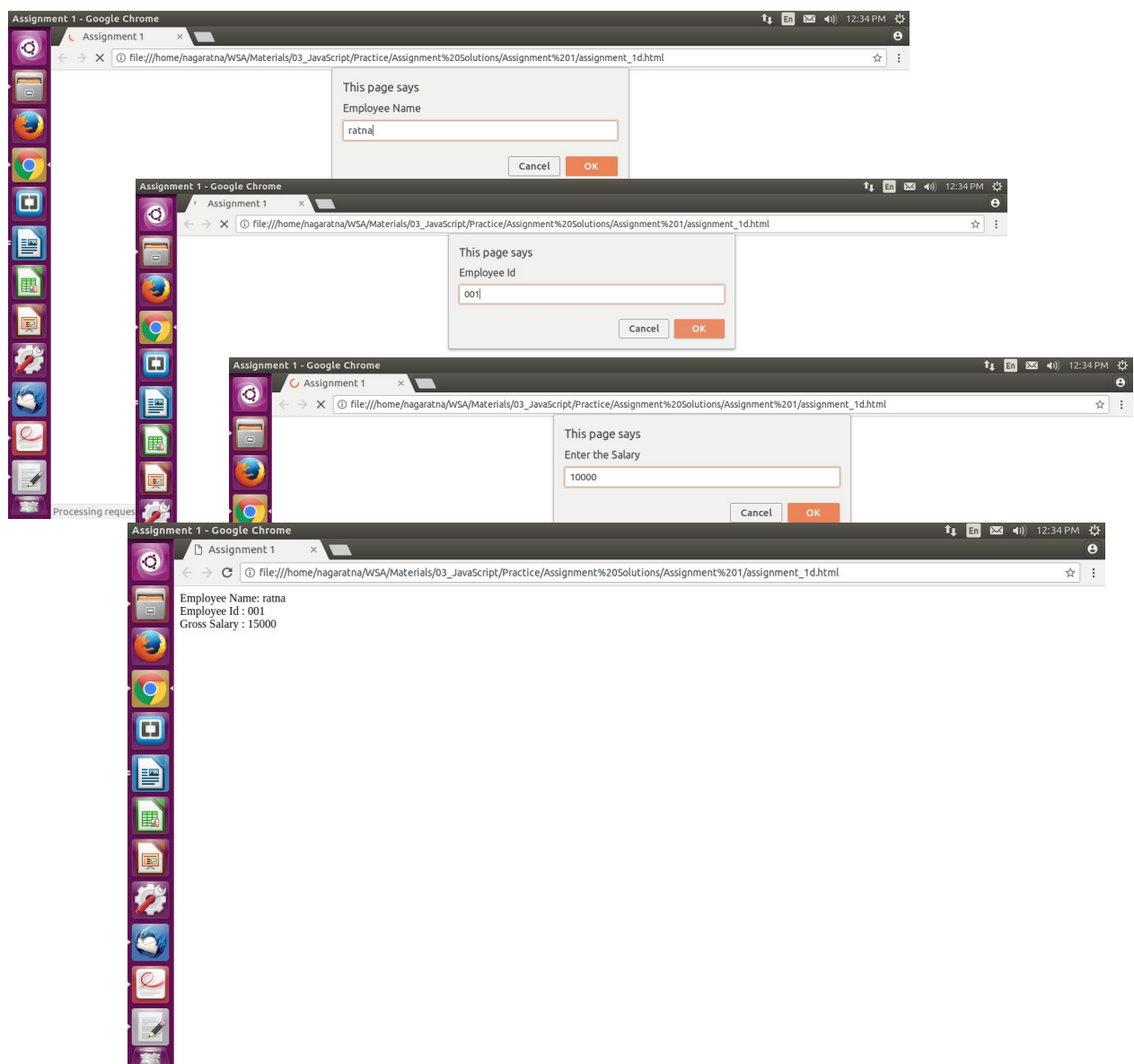 **Celcius = Fahrenheit - 32 / 1.8.**
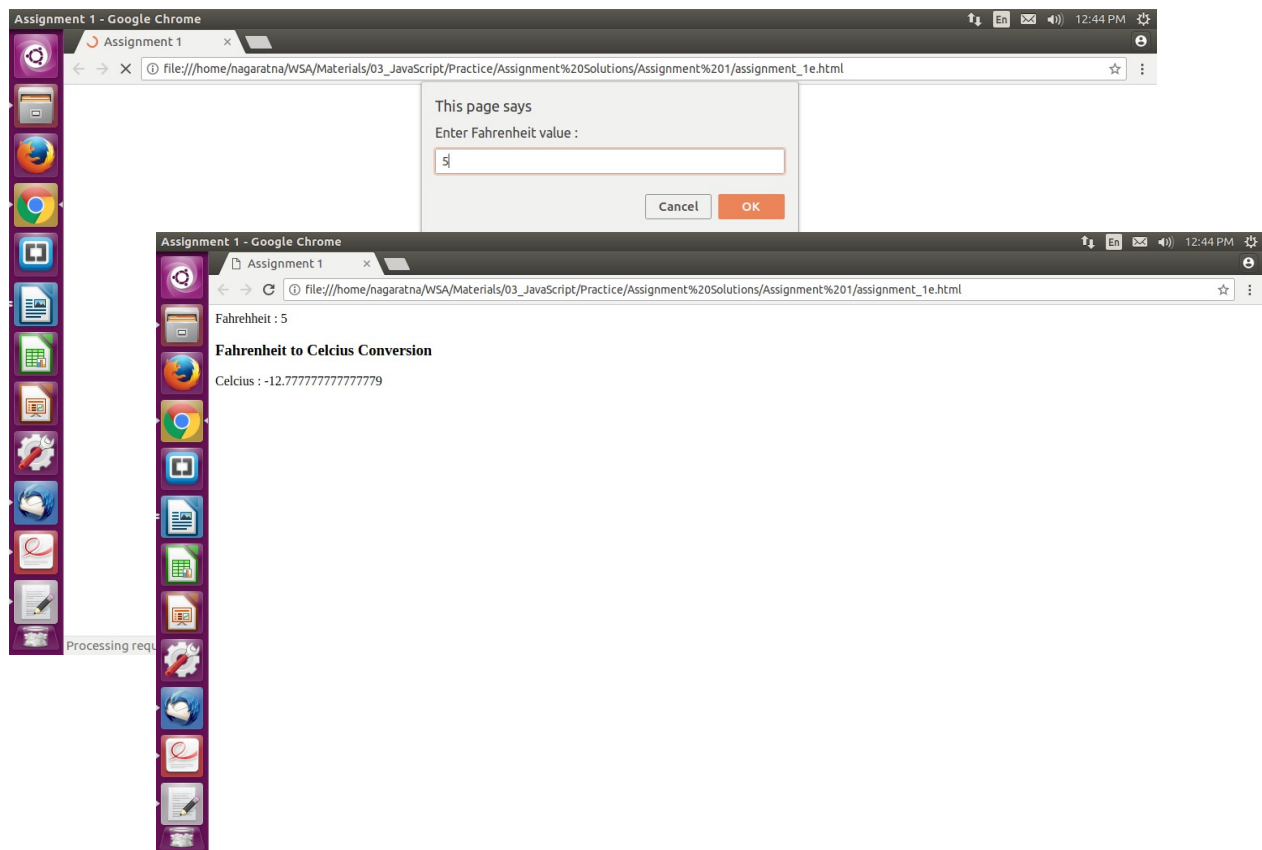
Objective:
- To understand the concept of numbers and mathemeatic operations in javascript.

Prerequisites:
- Basic operators

Sample Execution:
Test Case:

Assignment 2

Write a Javascript program to design a nim game.

Description:
- Nim is a mathematical game of strategy in which two players take turns removing objects from distinct heaps, which has following rules:
- There is a heap of stones on the table, each time one of you take turns to remove 1 to 3 stones.
- The one who removes the last stone will be the winner.
- You will take the first turn to remove the stones. Both of you are very clever and have optimal strategies for the game. Continue the game until the last stone is removed.
- Special Case :
  If there are 4 stones in the heap, then you will never win the game: no matter 1, 2, or 3 stones you remove, the last stone will always be removed by your friend.

Objective:
- To understand the concept of conditional operations in javascript.

Prerequisites:
- Conditional loop

Sample Execution:
Test Case 1:
    Input: 5
    Output : You won the game

Test Case 2:
    Input: 4
     Output : Your friend won the game

Assignment 3

Write a Javascript Function to generate the unique PIN number of given length n.

Description:
- Given the length, your job is to generate the unique PIN number.
- For example, if user enters length as 4 then u should generate 4 digit unique number for individual user.

Objective:
- To understand the concept of numbers and mathemeatic operations in javascript.

Prerequisites:
- Loop
- Number

Sample Execution:
Test Case 1:
Input: length : 4
Output: 4561 (random number not necessarily the same output)

Test Case 2:
Input: 6
Output: 123456

Topics: String ,Number Date ,Boolean

Assignment 4

Write a JavaScript program

        a) To remove specified number of characters from a string.

        b) To split a string and convert it into array of words.

        c) To capitalize the first letter of each word in a string.

        d) To reverse a given string.

       e) To insert a string within a specific position in another string.

Description:

- In Javascript String is a object which lets you work with a series of characters; it wraps Javascript's string primitive data type with a number of helper methods.
- In this program u have to work with the string.
  a) In this case you must be able to remove the specified number of characters from string, given the position and the number of characters.

  b) Split the string and store it to the array and display that array to the user.

  c) Capitalise each word of the string e.g if the string is "hello world" then the output should be "Hello World".

  d) Reverse a given string e.g if the string is Hello then output should be olleH.

  e) To insert a string within a specific position in another string.

Objective:
- To understand the concept of string operations in javascript.

Prerequisites:
- String
- Loop

Sample Execution:
Test Case:
a) Input : Hi How are You?

Position : 2
Number of characters : 3

Output : Hi are You?

b) **Input :** Apple banana mango melon
   O**utput : ["apple","banana","mango","melon"]**

c) **Input :** my name is sachin tendulkar
   Output : My Name Is Sachin Tendulkar

d) **Input :** hello
   Output : olleh

e) **Input :** String1 : Hi how are you?
             String 2 : Good morning
   Output : Hi Good morning how are you?

Assignment 5

Write a Javascript program to

a) **To Convert a decimal number to binary, octal and hexadecimal.**

b) **To generate a Random Integer.**

c) **To check whether a value is numeric or not.**

d) **To get the number of days in a month .**

e) **To get the number of days in a year.**

Description:

- In this program u have to
   a) Convert given decimal number to binary, octal and hexadecimal.

   b) Generate the random integer until specified range. e.g if the given range is 100 then it should generate the random number from 1 to 100.

   c) Check whether the input value is numeric or not. e.g if user enters 9 then it should display it as a numeric.

   d) Get the number of days in a month. e.g,
      If user enters the month as january then the program should display the output as 31.

   e) Get the number of days in a year. E.g
      If user enters the year 2009 then output should be 365. (Note: Check whether the year is leap year or not).

Objective:
- To understand the concept of Number in javascript.

Prerequisites:
- Number
- Loop
- Conditional Statements

Sample Execution:
Test Case:
a) Input : 17
   Output :
             Binary : 10001
             Hexa   : 11
             Octal : 021

b) Input : 100
   Ouput : 25 (Random number between 1 to 100)

c) Input : 100
   Ouput : numeric

   Input : hi
   Output : not a numeric

d) Input : March
   Ouput : 31

e) Input : 2005
   Ouput : 365

Assignment 6

Write in javascript language that takes an integer argument N and returns the sum of the first N + 1 even Lucas Numbers.

Description:
- Lucas number is defined to be the sum of its two immediate previous terms, thereby forming a fibonacci integer series. The first two Lucas numbers are $L0 = 2$ and $L1 = 1$ as opposed to the first two Fibonacci numbers $F0 = 0$ and $F1 = 1$. Though closely related in definition, Lucas and Fibonacci numbers exhibit distinct properties.

  The Lucas numbers may thus be defined as follows:

$$L_n := \begin{cases} 2 & \text{if } n = 0; \\ 1 & \text{if } n = 1; \\ L_{n-1} + L_{n-2} & \text{if } n > 1. \end{cases}$$

(where n belongs to the natural numbers)

Objective : To understand the concept of Recursion in javascript.

Example:
    Input   : n=6
    Lucas Series : 2,1,3,4,7,11
    Explanation:
            L0 = 2
            L1 = 1
            L2 = L0+L1 = 3
            L3 = L2+L1 = 4
            L4 = L3+L2 = 7
            L5 = L4+L3 = 11
    Sum of even integer : 2+4 = 6

Prerequisites:
* Loops
* Conditiponal loop

Sample Execution:
Test Case 1:
positive integer n: 6
Lucas Series : 2,1,3,4,7,11
Sum of even integer : 6

Test Case 2:
positive integer n: 10
Lucas Series : 2,1,3,4,7,11,18,29,47,76
Sum of even integer : 100

Assignment 7

Write a program that prints the numbers from 1 to 100. But for multiples of three print "Fizz" instead of the number and for the multiples of five print "Buzz". For numbers which are multiples of both three and five print "FizzBuzz".

Description:
* Accept the positive integer n = 100.
* If number is 3,9,12,15................99, then print Fizz
* If number is 5,10,15,20...............100, then print Buzz
* If number is 3,5,910,12,15...........100, then print FizzBuzz

Objective : To understand the concept of numbes and loops in Javascript.

Prerequisites:
* Loops
* Conditiponal loop

Sample Execution:
Test Case 1:
positive integer n: 100
Output : 1,2,Fizz,4,Buzz,Fizz,7,8,Fizz,Buzz,11,Fizz,13,14,FizzBuzz....................Buzz

Assignment 8

Write a Javascript program to determine whether the robot makes a circle or not.

Description:
• Initially, there is a Robot at position (0, 0). Given a sequence of its moves, judge if this robot makes a circle, which means it moves back to the original place or not.
• The move sequence is represented by a string. And each move is represent by a character.
• The valid robot moves are R (Right), L (Left), U (Up) and D (down).
• The output should be true or false representing whether the robot makes a circle.

Example:
   Example 1:
         Input: "UD"
         Output: true
   Example 2:
         Input: "LL"
         Output: false
   Example 3:
         Input: "LRRL"
         Output: True

   Example 4:
         Input: "LLUD"
         Output: false

Prerequisites:
• Switch
• Conditiponal loop

Sample Execution:
Test Case 1:
Robot Move : LL
Output : false

Assignment 9

Write a Javascript program to display the longest word from the given string.

Description:
- Consider a given string "Hello Good Morning All".
- From the above string the longest word is "Morning".
- Your job is to display the "Morning" to the user.

Example:
   Example 1:
         Input: "Sample Arguments goes here"
         Output: Arguments
   Example 2:
         Input: "My Name is Steve Job"
         Output: Steve

Prerequisites:
- String
- Conditiponal loop

Sample Execution:
Test Case 1:
     String Input: "Sample Arguments goes here"
     Output : Arguments

Test Case 2:
     String Input: "Hello All How Are You All Doing"
     Output : Hello Doing

Assignment 10

Write a Javascript program to scramble the word to given position.

Description:
- Accept a input string and position to shuffle the each word of the string
- For example, if user enters string "abcd" and position as 3,1,0,2 then the output should be dbac

Example:
   Example 1:
         Input: string: abcd
            position: 3,1,0,2
         Output: dbac

Prerequisites:
- Function
- For Loop

Sample Execution :
Test case :
Input: string: abcd
        position: 3,1,0,2
        Output: dbac

Assignment 11

Write a javascript program to swap the word from lowercase to uppercase and vice versa.

Description:
- Given a string "Hello World" it should swap the case of the string.
- For example if user enters Hello World then the ouput should be hELLO wORLD

Prerequisites:

- For loop
- If else
- Function

Sample Execution:
Test case 1:
Input : Hello World
Output : hELLO wORLD

Test case 2:
Input : hOw ArE yOu
Output : HoW aRe YoU

Topics : Controlling Flows & Array

Assignment 12

Write a program to input a number and check whether it is odd or even

Description:
- This program is to demonstrate whether the input number is even or odd. e.g if user enters 2 then the ouput should be even number.

Objective : Understand the control flow in javascript.

Prerequisites:
- For loop

- If else
- Function

Sample Execution:
Test case:
Input : 5
Output : odd number

Assignment 13

Write a program to input three subjects marks and calculate average marks and display grade according to average marks.

Description :
- **The Average marks and grade will be given as:**

Average	Grade
>=90	Ex
80-90	A+
70-80	A
60-70	B+
<60	Fail

Objective : Understand the conditional statement and switch cases in javascript.

Prerequisites:
- For loop
- If else
- switch

Sample Execution:
Test case:
Input : 55, 55 , 55
Output : Fail

Assignment 14

Write a program to generate fibonaci series.

Description :

- In mathematics, the **Fibonacci numbers** are the numbers in the following integer sequence, called the **Fibonacci sequence**, and characterized by the fact that every number after the first two is the sum of the two preceding ones.

  0,1,1,2,3,5,8,13.............n

Objective : Understand the recursion and loop in javascript.

Prerequisites:
- For loop
- recursion

Sample Execution:
Test case:
Input : 10
Output : 0,1,1,2,3,5,8,13,21,34

Assignment 15

Write a program to generate following sum of series

        a) $1 + 1/2 + 1/3 + \ldots\ldots\ldots\ldots\ldots\ldots + 1/n$.

        b) $2 + 4 + 6 + \ldots\ldots\ldots\ldots\ldots\ldots\ldots + n$.

Description :

- Program to work on the number series as mentioned above.

- N is a positive integer.

- You must generate the sum of the series until the given range of n.

Objective : Understand the numbers and conditional loops in javascript.

Prerequisites:
- For loop
- arithmetic operation.

Sample Execution:
Test case:
Input : 3
Output : a) 1.33

b) 12

Assignment 16

Write a program to input any two number and swap that without using third variable.

Description :

- Generally swapping will be done by using 3 variables. But in this program you should be able to swap the two numbers without using 3rd variable.

Objective : Understand the numbers and swap in javascript.

Prerequisites:
- arithmetic operation.

Sample Execution:
Test case:
Input : num1 : 3
        num2 : 4
Output : num1 : 4
           num2 : 3

Assignment 17

Write a program to generate armstrong number of three digits.

Description :

- In mathematics, armstrong is a number that is the sum of its own digits each raised to the power of the number of digits.
- For example,

$$153 = 1^3 + 5^3 + 3^3.$$

- Generate such 3 digit numbers (100 to 999).

Objective : Understand the number operation in javascript.

Prerequisites:
- arithmetic operation.

Sample Execution:
Test case:
Input : 100 to 999
Output : 153, 370, 371, 407

Assignment 18

Write a program to print following output :

```
a) 1                    b)  1                   c)  *  *  *  * *
   2 2                      2  3                      *  *  *  *
   3 3 3                    4  5 6                     *  *  *
   4 4 4  4                 7  8  9  10               *    *
                                                        *
```

Description :

- Generate the above pyramid structure by using loops.

Objective : Understand the loop and control flow in javascript.

Prerequisites:
- Loop

Sample Execution:
Test case:

Output :

```
a)1                     b)  1                   c)  *  *  *  * *
   2 2                      2  3                      *  *  *  *
   3 3 3                    4  5 6                     *  *  *
   4 4 4  4                 7  8  9  10               *    *
                                                        *
```

Assignment 19

Write a program to input 10 numbers in an array and count total positive and negative number.

Description :

- In this program you should input 10 numbers and store it to the array.

- From that array count how many positive integer and how many negative integers are present.

Objective : Understand the array and control flow in javascript.

Prerequisites:
- array
- control flow

Sample Execution:
Test case:
Input : 1, -2, -3, 4, 6, -9, 3, 5, -9, 10
Output : Positive Numbers : 6
          Negative Numbers : 4

Assignment 20

Write a program to join all the element of an array into string.

Description :

- In this program you should input the elements and store it to the array.

- Convert that elements of array into string.

Objective : Understand the array and string in javascript.

Prerequisites:
- array
- string

Sample Execution:
Test case:
Input : ["hi","hello","how","are","you"]
Output : "hi how are you"

Assignment 21

Write a program to compute sum and product of array of integer.

Description :

- In this program you should input the elements and store it to the array.

- Find the sum and product of those integers.

Objective : Understand the array and loops in javascript.

Prerequisites:
- array
- arithmetic operation

Sample Execution:
Test case:
Input : [1,2,3,4,5,6,7,8,9]

Output : sum : 45

       product : 362880

Assignment 22

Write a program to arrange the element of an array in ascending and descending order.

Description :

- In this program you should input the elements and store it to the array.

- Display those elements of array in ascending and descending order.

Objective : Understand the array and loops in javascript.

Prerequisites:
- array
- loop

Sample Execution:
Test case:
Input : [8,5,3,7,6,2,3,1]
Output : ascending order : [1,2,3,3,5,6,7,8]

       descending order: [8,7,6,5,3,3,2,1]

Assignment 23

Given an array of 2n integers, write a JavaScript program to find sum of   min(ai, bi).

Description:
Given an array of 2n integers, your task is to group these integers into n pairs of integer, say (a1, b1), (a2, b2), ..., (an, bn) which makes sum of min(ai, bi) for all i from 1 to n as large as possible.

Example:
Input   : [1,2,3,4]
Output : 4
Explanation: n is 2.
minimum sum of pairs = min(1, 2) + min(3, 4) = 4.

 Note:
- n is a positive integer, which is in the range of [1, 10000].
- All the integers in the array will be in the range of [-10000, 10000].

Prerequisites:
- Arrays
- Loops

Sample Execution:

Test Case 1:

positive integer n: 4
array : [3,5,6,2,8,1,4,1]
Sum of min(ai,bi) : min(3,5)+min(6,2)+min(8,1)+min(4,1) = 7

Test Case 2:
positive integer n: 5
array : [10,22,32,12,10,34,7,23,45,50]
Sum of min(ai,bi) : 84

Assignment 24

Write a Javascript program to determine the perimeter of the island .

Description:

- You are given a map in form of a two-dimensional integer grid where 1 represents land and 0 represents water.
- Grid cells are connected horizontally/vertically (not diagonally). The grid is completely surrounded by water, and there is exactly one island (i.e., one or more connected land cells).
- The island doesn't have "lakes" (water inside that isn't connected to the water around the island).
- One cell is a square with side length 1. The grid is rectangular, width and height don't exceed 100.

Example:
Input : [[0,1,0,0],
        [1,1,1,0],
        [0,1,0,0],
        [1,1,0,0]
    ]
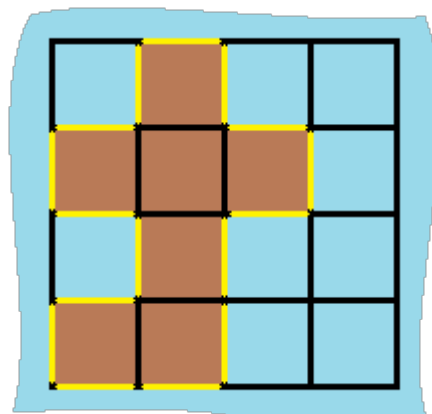
Output : 16 (yellow strips)

Prerequisites:
- Grid of Array
- Conditiponal loop

Sample Execution:
Test Case 1:

>Input array : [[0,1,0,0], [1,1,1,0], [0,1,0,0], [1,1,0,0]]
>Ouput : 16

Assignment 25

Write a JavaScript function to check whether it is palindrome or not.

Description :

- A **palindrome** is a word, phrase, number, or other sequence of characters which reads the same backward as forward, such as *madam* or *racecar*.
- Display whether the input text or number is palindrome or not

Objective : Understand the loop and arithmetic operation in javascript.

Prerequisites:
- number
- string
- control flow

Sample Execution:
Test case:
Input : 111
Output : palindrome

Test case:
Input : madam
Output : palindrome

Assignment 26

Write a JavaScript function to count the number of vowels in a string.

Description :

- A **vowel** is a letter of the alphabet (a, e, i, o, u) that represents a speech sound created by the relatively free passage of breath through the larynx and oral cavity.

- This program should accept the string input and display the number of vowels present in that string.

Objective : Understand the string concept in javascript.

Prerequisites:
- string
- control flow

Sample Execution:
Test case:
Input : i am geetha
Output : number of vowels : 5

Assignment 27

Write a JavaScript function to accept a parameter as a string and converts the first letter of each word in uppercase letter.

Description :
- Accept the input string from user.
- Convert first character from each word to uppercase.

Objective : Understand the string concept in javascript.

Prerequisites:
- string
- control flow

Sample Execution:
Test case:
Input : i am geetha
Output : I am Geetha

Assignment 28

Write a JavaScript recursive function to reverse a string.

Description :

- Accept the input string from user.
- Reverse that string usong recursion function.

Objective : Understand the string concept in javascript.

Prerequisites:
- string
- Recursion

Sample Execution:
Test case:
Input : radha ramana
Output : anamar ahdar

Assignment 29

Write a JavScript function to find factors of a positive integer.

Description :

- "Factors" are the numbers you multiply to get another number. For instance, factors of 15 are 3 and 5, because 3×5 = 15. Some numbers have more than one factorization (more than one way of being factored). For instance, 12 can be factored as 1×12, 2×6, or 3×4.
- Your job is to find the factors of the entered number.

Objective : Understand the string number and arithmentic operation in javascript.

Prerequisites:
- number
- arithmetic operation
- control flow

Sample Execution:
Test case:
Input : 2
Output : factors of 2 are : 1,2

Assignment 30

Write a JavaScript program

a) To create employee object and access all the properties of employee.

b) To delete deptName property from employee object.

c) To find the length of employee object.

Description :

- In programming language Object is a real world entity which will have two property state and behavior.
- In JavaScript, almost "everything" is an object.
- This program should demonstrate the usage of object in Javascript.
- Your job is to create an employee object and that object shouls have properties like, EmpName, EmpId, EmpSal, and deptName.
- Find the length of the employee object.
- Delete the deptName property from the object and display the output after deleting the property.

Objective : Understand the basics of objects in javascript.

Prerequisites:
- Object

Sample Execution:
Test case:

Input : Employee {
        name : "raghunath",
        empId : 001,
         empSalray : 10000,
         deptName : "WSA"
    }

Output : a)   name : raghunath

        empId : 001

        empSalray : 10000

deptName : "WSA"

    b) Length of the Employee object : 4

    c) deptName deleted

Assignment 31

Write a JavaScript program to find area and perimeter of rectangle.

Description :

- Create an object rectangle and have the properties like width, height.

- Rectangle object should contain 2 function, one is area and other is perimeter.

- Calculate the area and perimeter of rectangle using the object Rectangle.

Objective : Understand the objects in javascript.

Prerequisites:
- Object
- Function

Sample Execution:

Input : Width : 11

    Height : 12

Output : Area : 132

    perimeter : 46

Assignment 32

Write a JavaScript to display a image and

    a) When the user places the cursor over the image change the image.

    b) When the user removes the cursor from the image, display the old image.

Description :

- Have a image in html document.
- Whenever user place the cursor over the image, that image should be replaced with another image and when cursor is moved it should display the previous image.

Objective : Understand the events handling in javascript.

Prerequisites:
- Document Object Model
- HTML

Sample Execution:
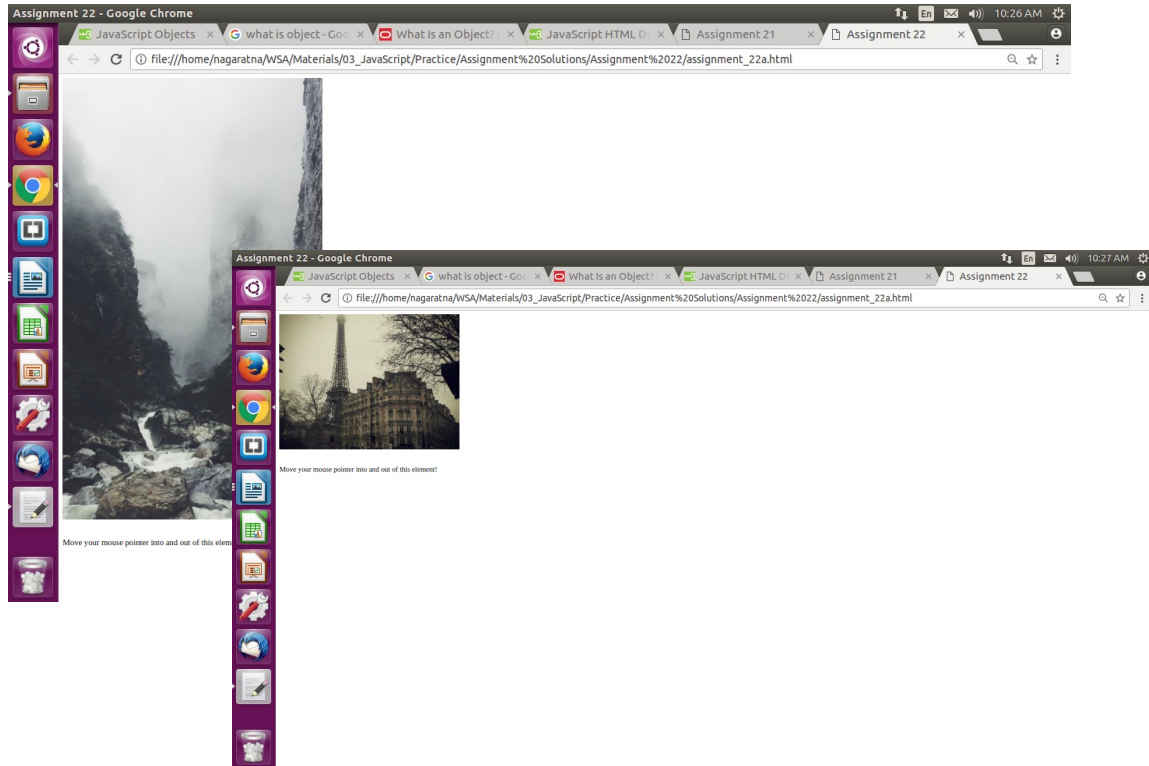
Assignment 33

Write a JavaScript program

a) Create a paragraph using HTML.

b) Create two buttons changeFont and borderImage.

c) When the user click on buttons , the onclick event handler calls function changeParaText and addBorder.

d) The changeParaText function then executes the statement that will change the font color , font size , font family and font weight   of paragraph and addBorder function will add border image to the paragraph.

Description :

- Have a <p> paragraph </p> tag and two buttons (change font, border image) in html.

- When user clicks on change font button it should change the font, size, font weight, color of the paragragh.

- When user clicks on border image button it should add the border to paragraph.

Objective : Understand the events handling in javascript.

Prerequisites:
- DOM
- HTML

Sample Execution:

file:///home/nagaratna/WSA/Materials/03_JavaScript/Practice/Assignment%20Solutions/assignment_23.html

Infuse your life with action. Don't wait for it to happen. Make it happen. Make your own future. Make your own hope. Make your own love. And whatever your beliefs, honor your creator, not by passively waiting for grace to come down from upon high, but by doing what you can to make grace happen... yourself, right now, right down here on Earth. - Bradley Whitford

Change Font | Border Image

Topics : Type Conversion & Regular Expression

Assignment 34

Write a JavaScript program to search a date within a string.

Description :

- Input string from user.

- Search the string whether it contains any date in it and display the date to the user.

Objective : Understand the type coversion and regular expression in javascript.

Prerequisites:
- Regular expression

Sample Execution:

Test case 1:

Input : hi today is 4/05/2018

Output : Dates in string : 4/05/2018

Test case 2:

Input : 04-05-2018 is the date today and tomorrow is 05/05/2018

Output : Dates in the string are : 04-04-2018

                                     05/05/2018

Assignment 35

Write a JavaScript program that works as a trim() function using regular expression.

Description :

- Input string from user and the word or space or any special characters which user wants to trim.

- Instead of trim function, use regular expression to trim the entered input from the string.

Objective : Understand the type coversion and regular expression in javascript.

Prerequisites:
- Regular expression

Sample Execution:

Test case 1:

Input : Hi how are you?

      Trim : space or " "

Output : hihowareyou?

Test case 2:

Input : Hi how are you?

      Trim : ?

Output : hi how are you

Assignment 36

Write a JavaScript function to check whether a string contains alpha ,dash and underscore.

Description :

- Input string from user.
- With the help of regular expression check whether string contains any alphanumeric, dash and underscore in it.

Objective : Understand the type coversion and regular expression in javascript.

Prerequisites:
- Regular expression

Sample Execution:

Test case 1:

Input : hi -8_

Output : string contains alpha, numeric, dash

Test case 2:

Input : Hi how are you

Output : String doesn't contain alpha, numeric or dash.

Assignment 37

Write a JavaScript program to create email registration form and validate the following data , all the fields must have entered data.

a) Enter The FirstName and LastName . Define PlaceHolder and field size 10.

b) Enter the User Name . User Name should be of minimum 8 character.

c) Enter the Password and confirm it in the next box .[Pasword between 6 to 20 characters which contain at least one numeric digits ,one uppercase and one lowercase letter.

d) Enter the birthday starting from month of Birth , day , year.

e) Select Your Country .

f) Select your gender (Create checkbox)

g) Enter the phone Number . (Phone number should be of 10 digits with no comma , no space , no punctuation mark.

h) Enter alternative Email address.

i) Agree to the Google terms of service and privacy policy by ticking the box.

j) Click the submit button. On submit the form welcome message should
   display.

Description :
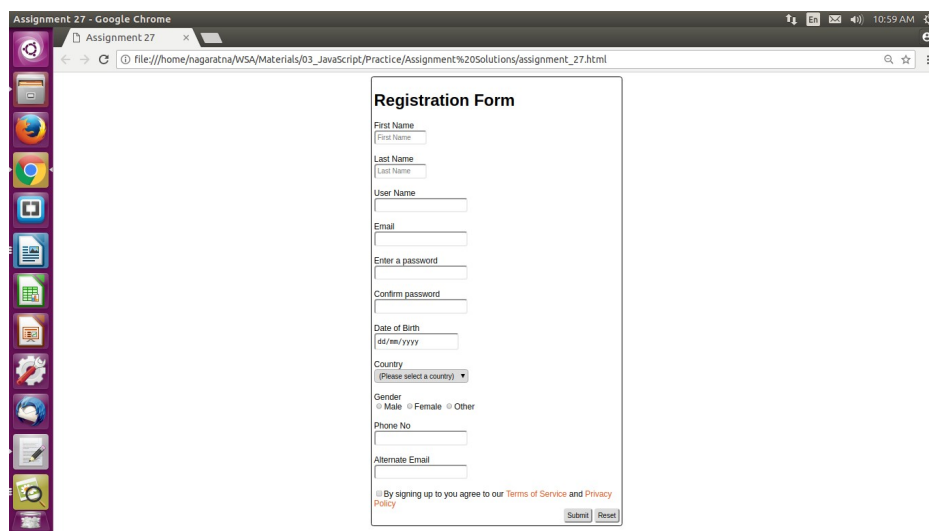
- Create a html page with above mentioned field.

- Validate all the field using javascript as described in the question.

Objective : Understand the validation of html page using javascript.

Prerequisites:
- HTML
- Control flow
- Functions

Sample Execution:

Topics : DOM JavaScript

Assignment 38

Write a JavaScript to modify the style of paragraph , while clicking the button font , font size and color of the pargaraph will be changed.

Description :

- Create a html page with a paragragh and 3 button change font, font size, change color.

- Modify the style of the content when clicked on chage font, change the color and font size when clicked on change color and font size.
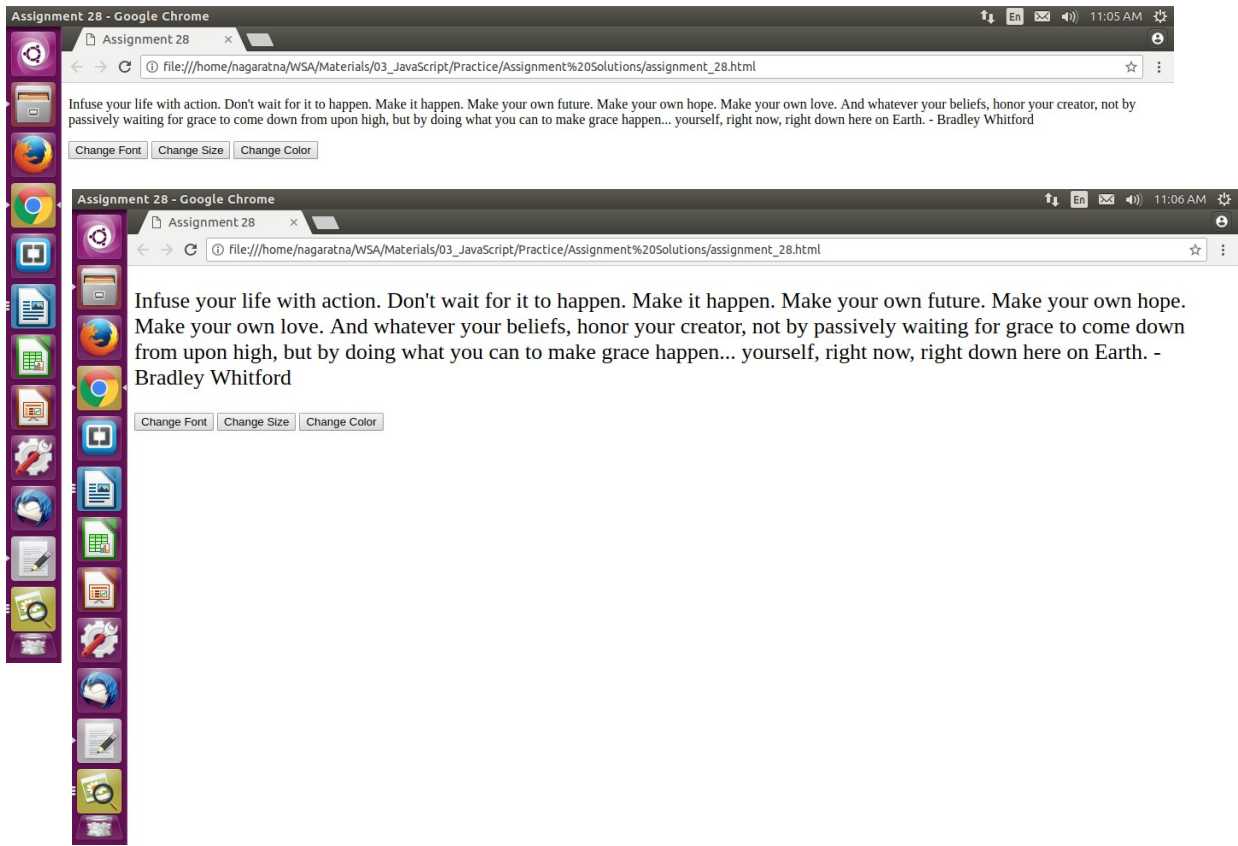
Objective : Understand the basic Dom in javascript

Prerequisites:
- HTML

- DOM

Sample Execution:
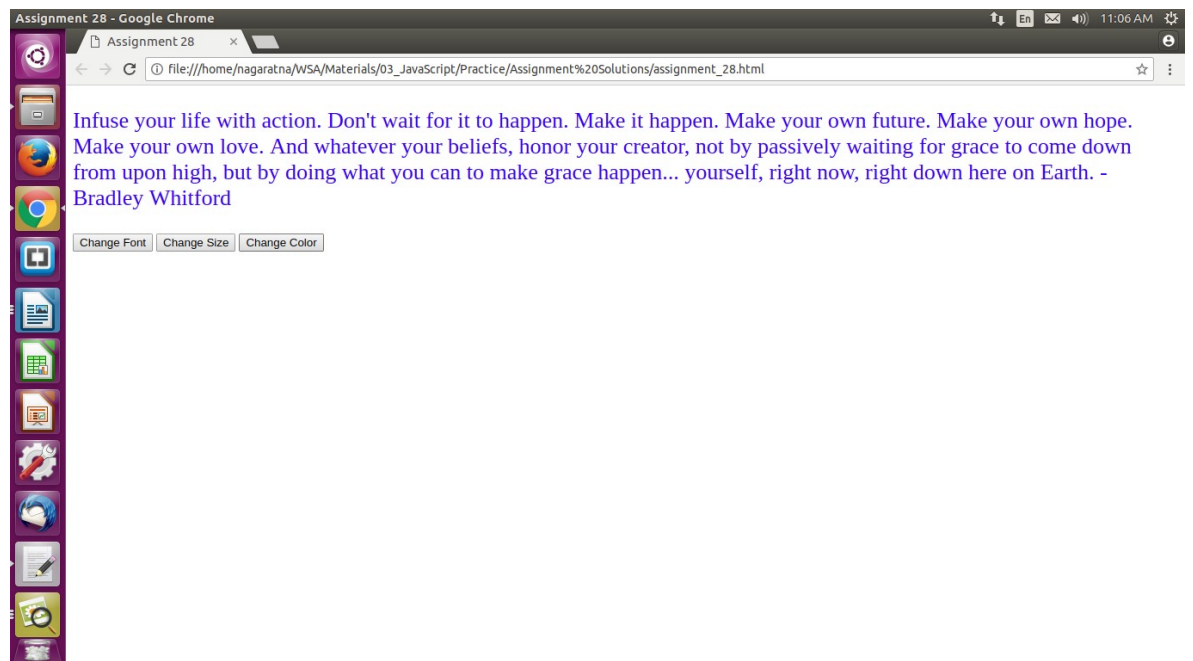
Assignment 39

Write a JavaScript function to get the value of href ,hreflang ,rel ,target and type attributes of the specified links.
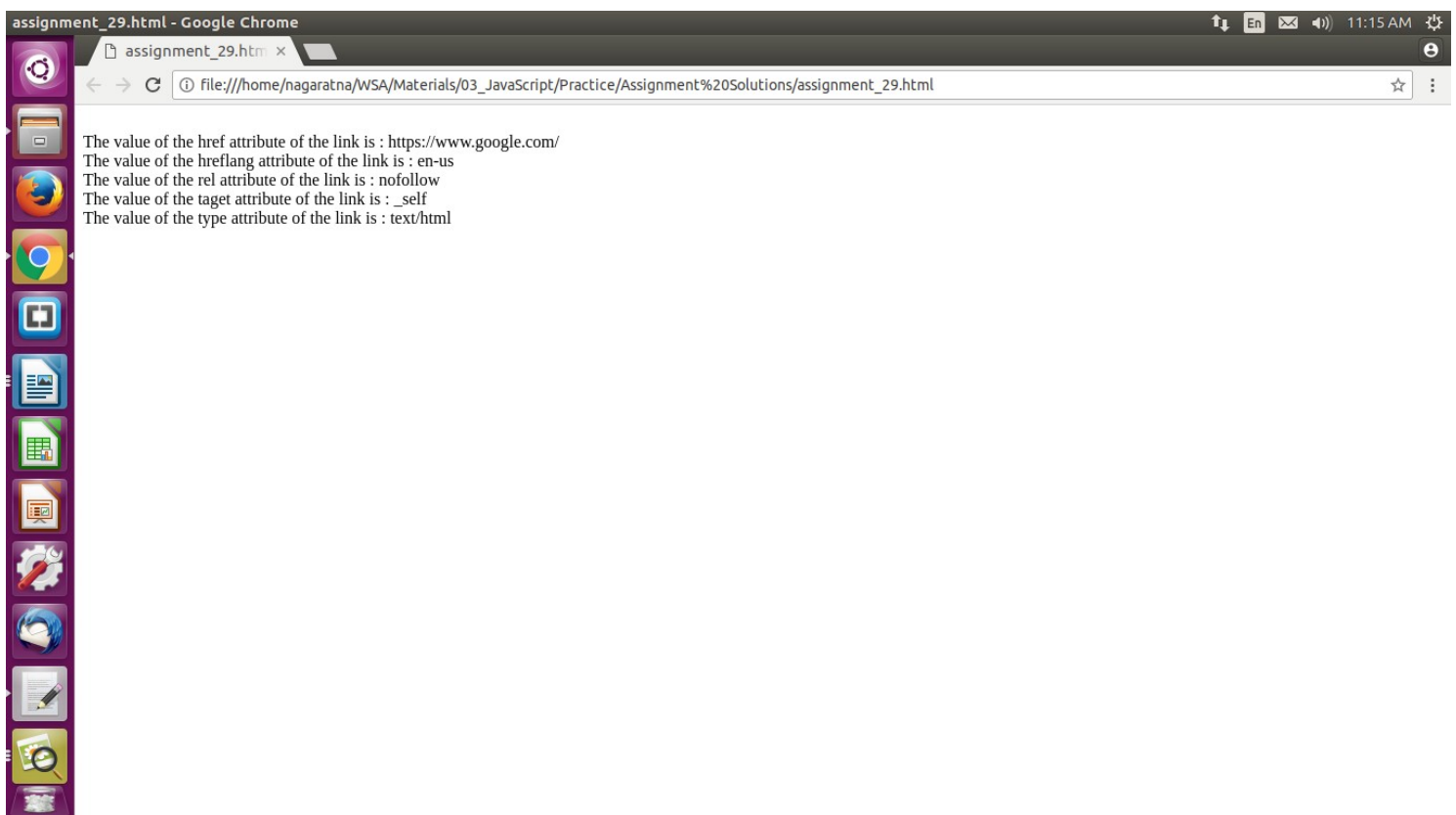
Description :

- Create a html page with a link which should have href, hreflang, rel, target, and type attributes.
- Your job is call a function in javascript which should return those values to the user.

Objective : Understand the Dom in javascript

Prerequisites:
- HTML
- DOM

Sample Execution:

Assignment 40

Write a JavaScript program to

a) count and display the items in a list box in a alert window.

b) remove items from a dropdown list.

Description :

- Create a html page with a dropdownlist which should contains list of items.

- Your job is call a function in javascript which will display the number of items in list and delete() function which will delete the specified state from that list.

Objective : Understand the Dom in javascript

Prerequisites:
- HTML
- DOM

Sample Execution:

Input : Dropdown List : Karnataka

Kerala

Tamilanadu

Telangana

UP

select the state : Kerala

Output : **Number of items in list : 5**

Dropdown List : Karnataka

Tamilanadu

Telangana

UP

Assignment 41

Write a JavaScript program

a) To create three paragarph

b) Create three buttons left ,right and center.

c) Dynamically change the allignment of paragraph by using the getElementByTagName().

Description :

- Create a html page with 3 paragraph and 3 buttons left, right and center.

- Your job is call a function in javascript which will dynamically align the paragraph by using the getElemnetByTagName().

Objective : Understand the Dom in javascript

Prerequisites:
- HTML
- DOM

Sample Execution:

Assignment 42

Write a JavaScript program to create three paragraphs with different class name and manipulate style rules using CSS class selectors.
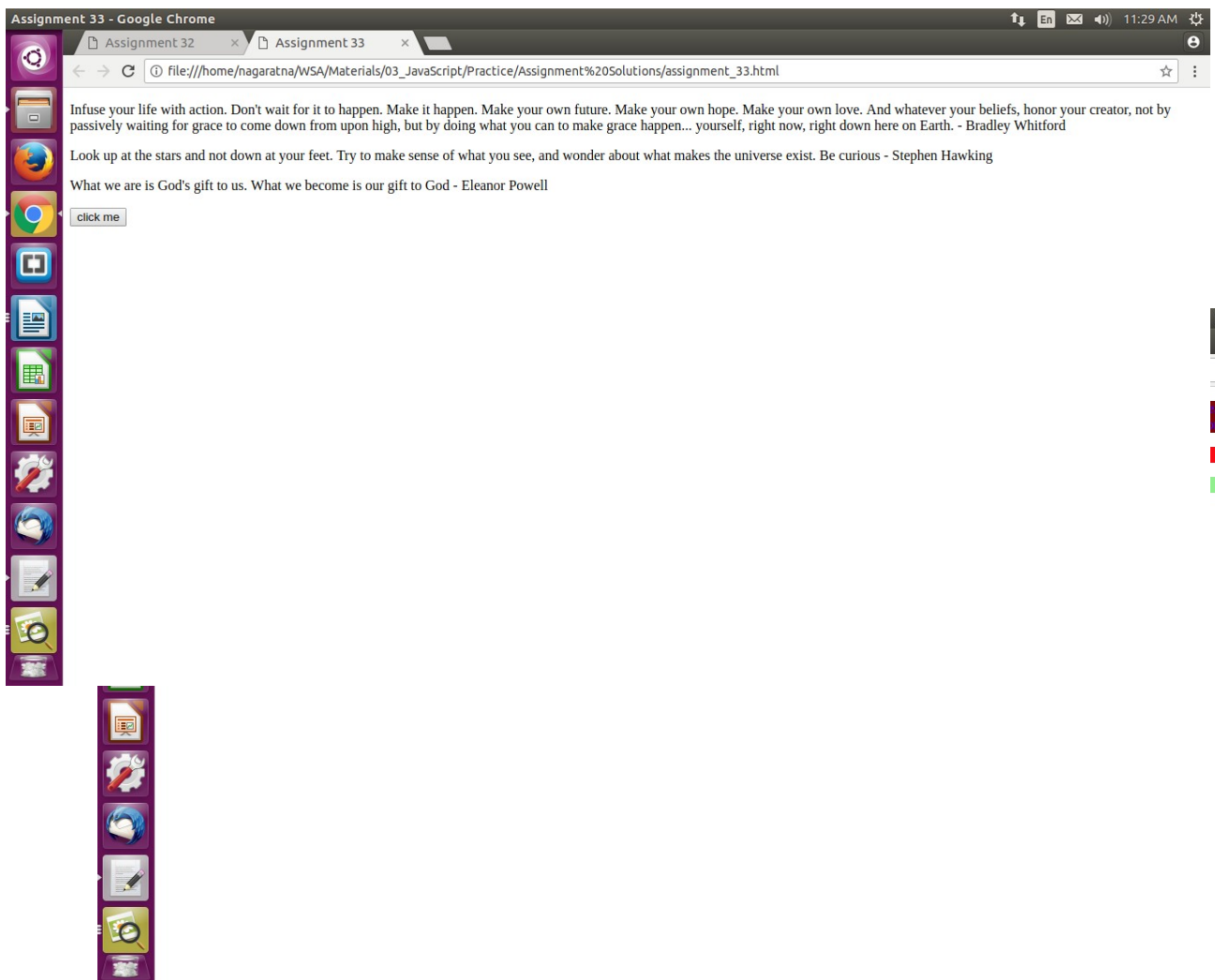
Description :
- Create a html page with 3 paragraph.
- Your job is call a function in javascript which will dynamically change the style of the paragraph.

Objective : Understand the Dom in javascript

Prerequisites:
- HTML
- CSS
- DOM

Sample Execution:

Assignment 43

Write a JavaScript program

        a) To make a paragraph using createElement method

        b) Create a new node with nav element .

        c) Create a text node with <strong> element.

        d) Add two node in the parent node.
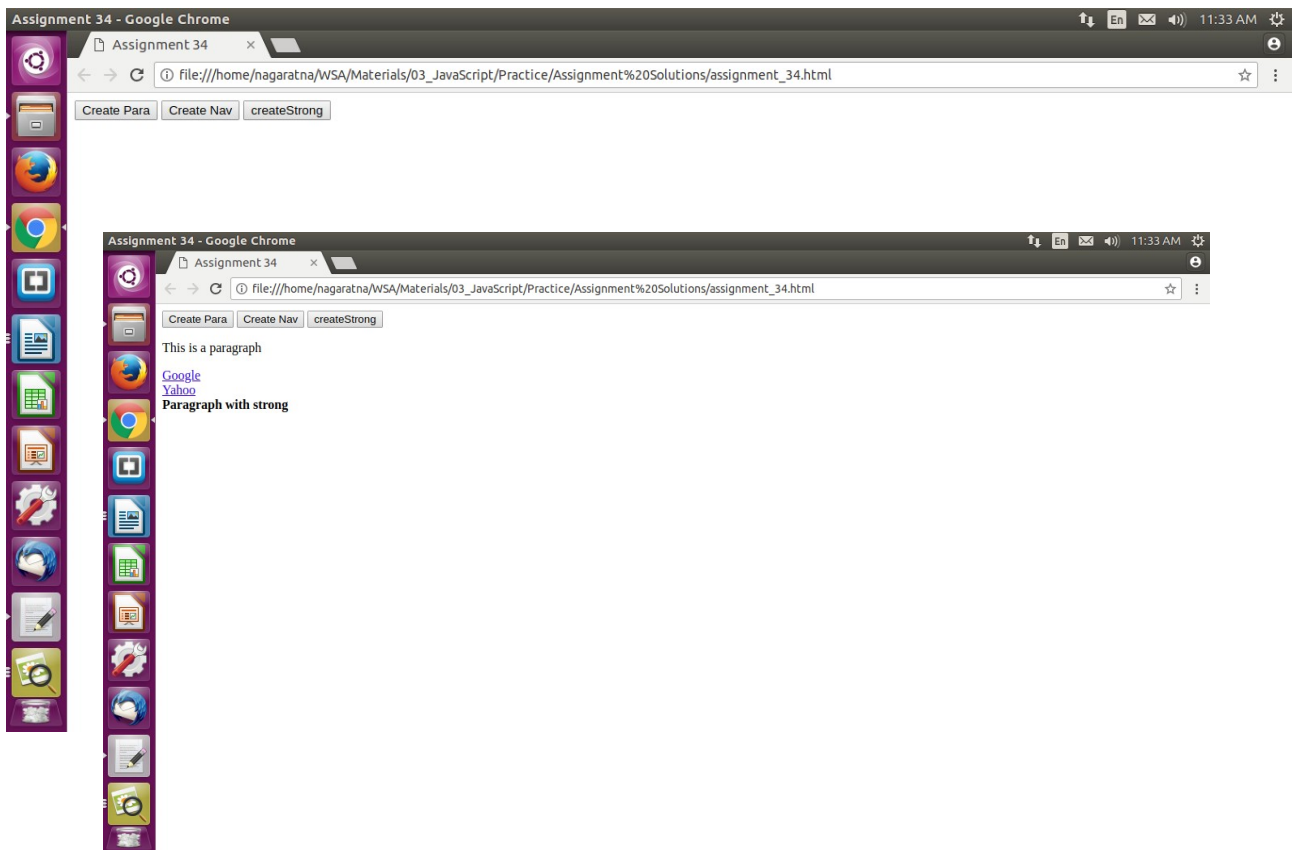
Description :

- Create a paragraph in webpage using createElement method of javascript.

- Create new node in that page with nav element.

- Add a text node with <strong> element.

- Add two node to the parent node of that web page.

Objective : Understand the Dom in javascript

Prerequisites:
- HTML
- CSS
- DOM

Sample Execution:

Topics : BOM JavaScript

Assignment 44

Write a JavaScript program that will create button

        a) For open a new google search window

        b) Resize the window .

        c) Scroll the window 10 pixels to the right.

   d) Move the new window relative to its current position.

Description :

- Create a webpage with button of value create, resize, scroll.

- When user clicks on that button it should open a new google search window.

- When user clicks on resize, decrease the size of the window.

- When user clicks on scroll, the window should be scrolled left or right.
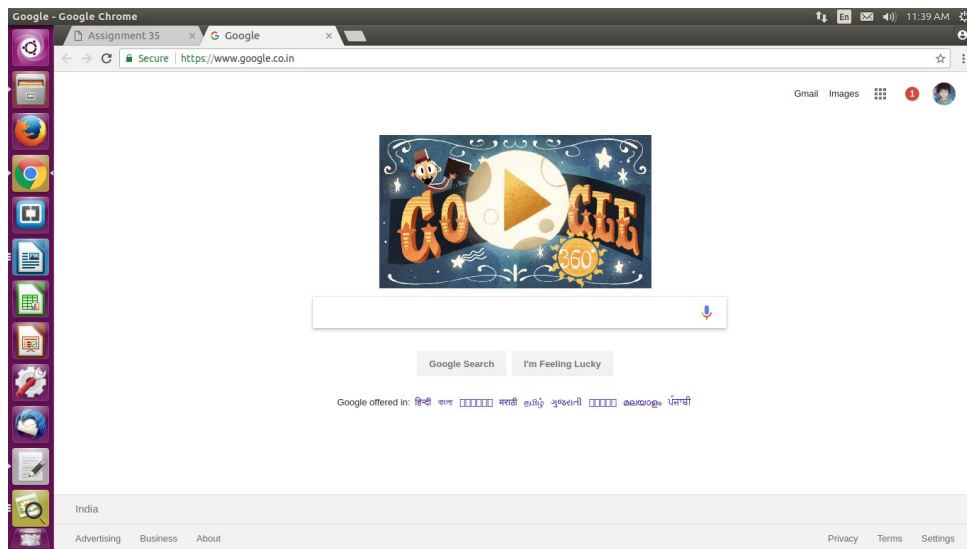
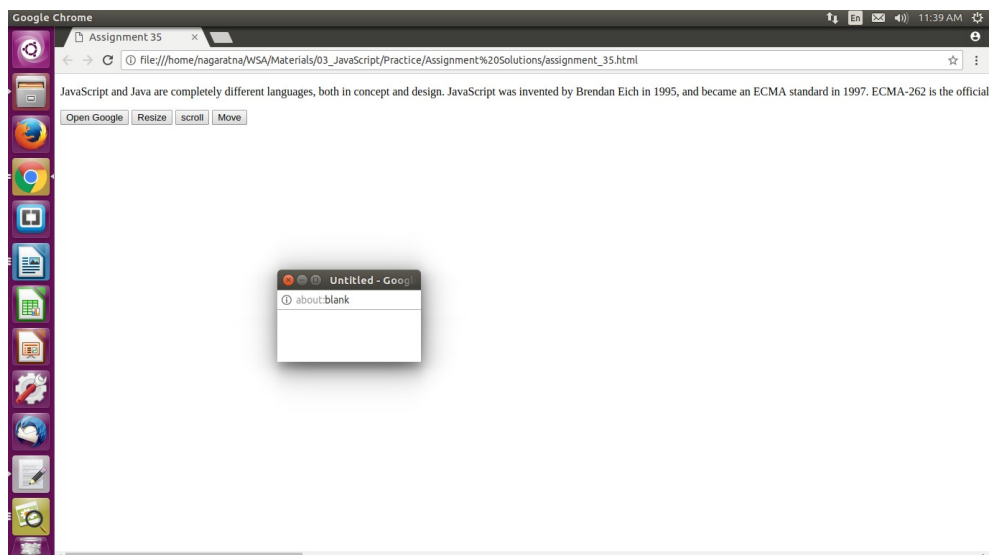**Objective :** Understand the BOM in javascript

Prerequisites:
- HTML
- CSS
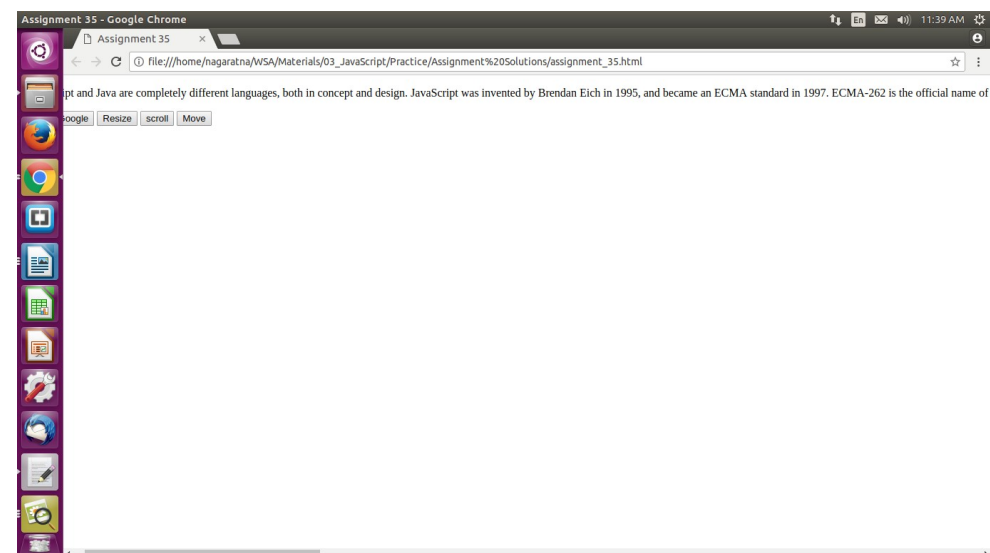- BOM

Sample Execution:
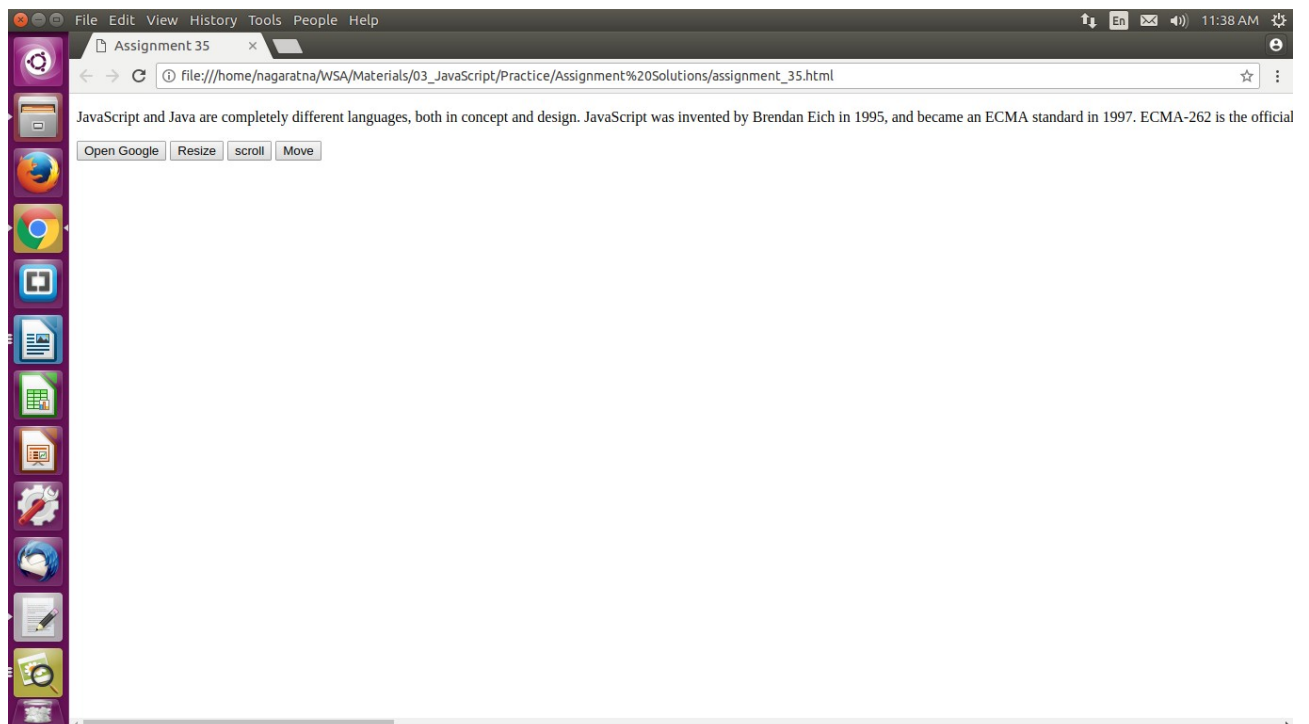
Google

Resize :

Scroll:

Assignment 45

Write a JavaScript program to display your name in every 30 seconds using timer.
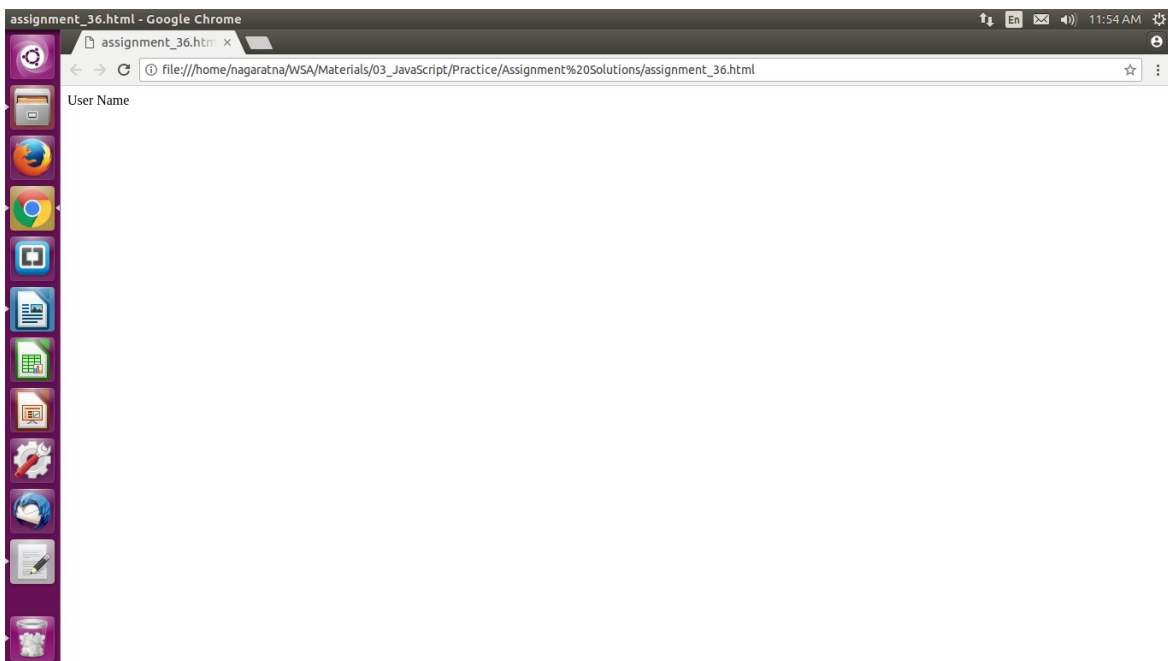
Description :

- Create a webpage which should display the user name in every 30 seconds
- Use timer function of BOM.

Objective : Understand the BOM in javascript

Prerequisites:
- HTML
- CSS
- BOM

Sample Execution:

Assignment 46

Write a JavaScript program

        a) First create a basic page in html that displays text and an image.

        b) Track how many times a user has visited your page by storing this information in a cookie.

        c) Display the information to the user for e.g. You have visted X number of times ! The current visit should be included in this number.

        d) Display the date and time of the user's last visit .

        e) If this user is first visit display e.g "You have never visited before" .

Description :

- Create a webpage which should display text and a image of your choice.

- Every time user visits the page ask for the name and store the information in a cookie.

- If user is visiting for the first time display message as "You have never visited before" with the user name else display the number of times they have visited the page.

- Along with the number of times, display the last visited date of the user.

Objective : Understand the BOM in javascript

Prerequisites:
- HTML
- CSS
- BOM

Sample Execution:

Rock or stone is a natural substance, a solid aggregate of one or more minerals or mineraloids. For example, granite, a common rock, is a combination of the minerals quartz, feldspar and biotite.

You have visiting 4th time
Last visited date : 02-05-2018