

CSE3002 – Internet & Web Programming  
Winter Semester – 2021 ~ 2022  
Embedded Lab  
L37 + L38 - Slot  
E- Record

Digital Assignment - 2

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BTECH (CSE) – 3<sup>rd</sup> YEAR  
SCOPE



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INDIA

DATE: 23<sup>rd</sup>--February– 2021

## Question

Write a script to take three numbers from the user and display the greatest number out of three.

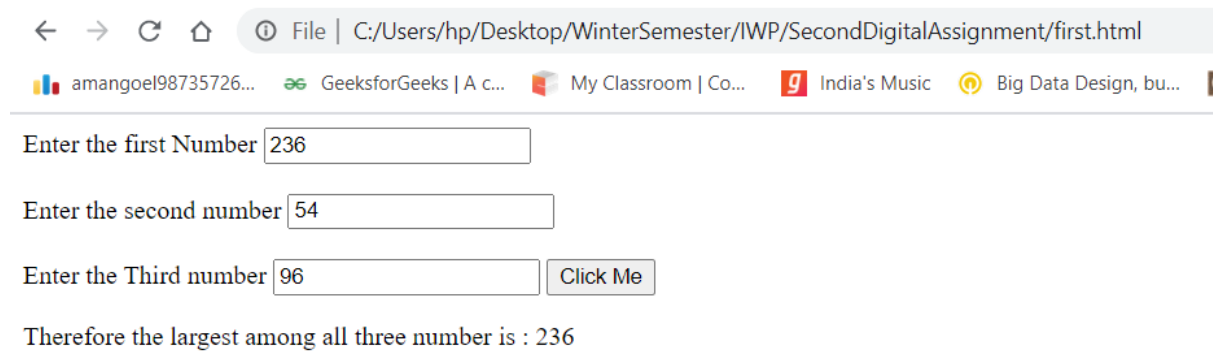
## Solution

## Code

```
<!--  
- Write a script to take three numbers from the user and display the greatest  
number out of three. -->  
  
<!DOCTYPE html>  
<html lang="en">  
<head>  
  <meta charset="UTF-8">  
  <meta http-equiv="X-UA-Compatible" content="IE=edge">  
  <meta name="viewport" content="width=device-width, initial-scale=1.0">  
  <title>Document</title>  
  <script>  
    function calculateLargest(){  
      var first = document.getElementById("firstinput").value;  
      var second = document.getElementById("secondinput").value;  
      var third = document.getElementById("thirdinput").value;  
      var answer = Math.max(first,Math.max(second,third));  
      document.getElementById("answer").innerHTML = answer;  
    }  
  
  </script>  
</head>  
<body>  
  <!-- <form onsubmit="calculateLargest()"> -->  
    <label for="firstinput">Enter the first Number</label>  
    <input type="number" id="firstinput" name="firstNumber">  
    <br><br>  
    <label for="secondinput">Enter the second number</label>  
    <input type="number" id="secondinput" name="secondNumber">  
    <br><br>  
    <label for="thirdinput">Enter the Third number</label>  
    <input type="number" id = "thirdinput" name="thirdNumber">  
    <button onclick="calculateLargest()">Click Me</button>  
  <!-- </form> -->  
  
  <p>Therefore the largest among all three number is : <span id="answer"></span></p>
```

```
</body>
</html>
```

## Output



← → ↻ 🏠 ⓘ File | C:/Users/hp/Desktop/WinterSemester/IWP/SecondDigitalAssignment/first.html

🇧🇷 amangoel98735726... 🌐 GeeksforGeeks | A c... 📖 My Classroom | Co... 🇮🇳 India's Music 🎧 Big Data Design, bu...

Enter the first Number

Enter the second number

Enter the Third number

Therefore the largest among all three number is : 236

## Question

Complete the following function called count that takes an array of integers and the size of the array, and return the number of items in the array that is greater than 13 and less than 29.

## Solution

## Code

```
<!--
- Complete the following function called count that takes an array of integers
and the
size of the array, and return the number of items in the array that is greater
than 13
and less than 29. -->

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

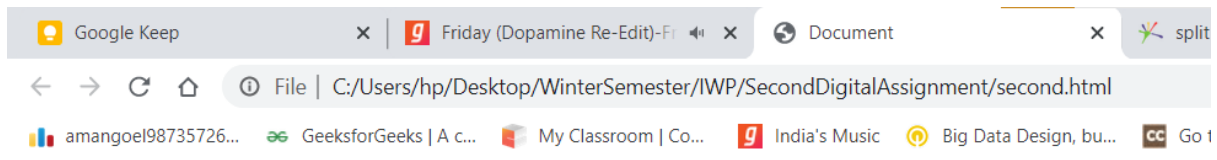
```

<title>Document</title>
<script>
    function count(w){
        var siz = w.length;
        var ans = 0;
        for(var i = 0; i < w.length;i++){
            if(w[i] < 29 && w[i] > 13){
                ans++;
            }
        }
        document.getElementById("answer").innerHTML = ans;
    }

    function getAnswer(){
        var inputString = document.getElementById("inputArray").value;
        var array = inputString.split(" ");
        for(var i = 0;i < array.length;i++){
            array[i] = parseInt(array[i]);
        }
        count(array);
    }
</script>
</head>
<body>
    <label for="inputArray">Please Enter all the elements seperated by space <
/label>
    <br><br>
    <input type="text" name="elements" id="inputArray">
    <br><br>
    <button onclick="getAnswer()">Click Me</button>
    <br><br>
    <div>Number of items in the array that is greater than 13 and less than 29
is : <span id="answer"></span></div>
</body>
</html>

```

## Output



Please Enter all the elements seperated by space

24 29 28 17 19 25

Click Me

Number of items in the array that is greater than 13 and less than 29 is : 5

## Question

Write a program that reads number of miles, cost of a gallon of gas, and car gas consumption (miles per gallon) and then determines the cost of a specific trip. The output should be displayed using `document.writeln`

SSS

## Solution

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <script>
    var costt;
    function myFunc(){
      var totalMiles = parseInt(document.getElementById("miles").value);
      var CostPerGallon = parseInt(document.getElementById("costOfgallon
s").value);
      var gasConsumption = parseInt(document.getElementById("consumption
").value);

      var totalNumberOfConsumedGallons = totalMiles / gasConsumption;
      var cost = totalNumberOfConsumedGallons * CostPerGallon;
      costt = cost;
      calledMe();
    }
  </script>
</head>
```

```

<body>
  <!--
Write a program that reads number of miles, cost of a gallon of gas, and car g
as
consumption (miles per gallon) and then determines the cost of a specific trip
. The
output should be displayed using document.writeln -->

    <label for="miles">Enter the number of Miles</label>
    <br><br>
    <input type="number" name="InputMiles" id="miles">
    <br><br>
    <label for="costOfgallons">Enter the Cost of a gallon of gas</label>
    <br><br>
    <input type="number" name="inputCost" id="costOfgallons">
    <br><br>
    <label for="consumption">Car gas consumption (miles per gallon) and then d
etermines the cost of a specific trip.</label>
    <br><br>
    <input type="number" name="inputConsumption" id="consumption">
    <br><br>

    <button onclick="myFunc()">Click Me</button>
    <script>
        function calledMe(){
            document.writeln("<p> Therefore total cost is : ",costt,"</p>")
            document.writeln("<p> Therefore total cost is : ",costt,"</p>");
        }
    </script>

</body>

</html>

```

## Output

Google Keep x Commitment Issues x Question javascript.pdf x Document x

File | C:/Users/hp/Desktop/WinterSemester/IWP/SecondDigitalAssignment/third.html

amangoel98735726... GeeksforGeeks | A c... My Classroom | Co... India's Music Big Data Design, bu... Go to C

Enter the number of Miles

Enter the Cost of a gallon of gas

Car gas consumption (miles per gallon) and then determines the cost of a specific trip.

Click Me

Google Keep x Commitment Issues x Question javascript.pdf x third.html x

File | C:/Users/hp/Desktop/WinterSemester/IWP/SecondDigitalAssignment/third.html

amangoel98735726... GeeksforGeeks | A c... My Classroom | Co... India's Music Big Data Design, bu... Go to C

Therefore total cost is : 548.3333333333333

## Question

According to Wikipedia a happy number is defined by the following process : "Starting with any positive integer, replace the number by the sum of the squares of its digits, and repeat the process until the number equals 1 (where it will stay), or it loops endlessly in a cycle which does not include 1. Those numbers for which this process ends in 1 are happy numbers, while those that do not end in 1 are unhappy numbers (or sad numbers). Write a JavaScript program to find and print the first 5 happy numbers

## Solution

### Code

```
<!--  
- 4. According to Wikipedia a happy number is defined by the following process  
:  
"Starting with any positive integer, replace the number by the sum of the squares of  
its digits, and repeat the process until the number equals 1 (where it will stay), or it
```

loops endlessly in a cycle which does not include 1. Those numbers for which this process ends in 1 are happy numbers, while those that do not end in 1 are unhappy numbers (or sad numbers). Write a JavaScript program to find and print the first 5 happy numbers. -->

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <script>
    function happy_number(num) {
      var m, n;
      var c = [];

      while (num != 1 && c[num] !== true) {
        c[num] = true;
        m = 0;
        while (num > 0) {
          n = num % 10;
          m += n * n;
          num = (num - n) / 10;
        }
        num = m;
      }
      return (num == 1);
    }

    var cnt = 5;
    var num = 1;
    var f5 = '';
    while (cnt-- > 0) {
      while (!happy_number(num))
        num++;
      f5 = f5 + (num + ", ");

      num++;
    }
    // document.getElementById("answer").innerHTML = f5;
    window.onload = function what(){
      document.getElementById("answer").innerHTML = f5;
    };
  </script>
</head>
</html>
```



```

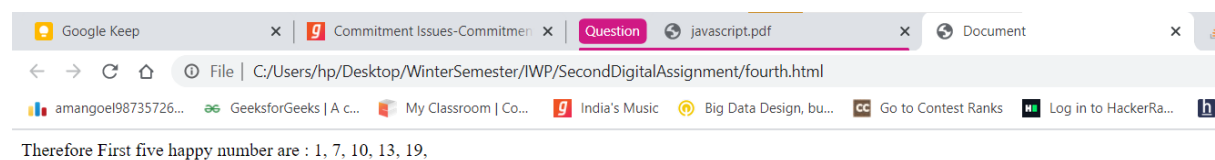
        console.log('First 5 happy numbers are : ' + f5);
    </script>
</head>

<body>
    <div>Therefore First five happy number are : <span id="answer"></span></div>
</body>

</html>

```

## Output



## Question 5

5. Develop an Online Greetings Designer using Javascript and CSS. Add options to

- i) change the image
- ii) Position the image (left, background, right)
- iii) Edit text
- iv) Change font size
- v) Change font color

## Code

```

<!--
- Develop an Online Greetings Designer using Javascript and CSS. Add options to
o
i) change the image
ii) Position the image (left, background, right)
iii) Edit text
iv) Change font size
v) Change font color -->

<!DOCTYPE html>
<html lang="en">

```

```

<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <h1>Online Greetings Designer</h1>
  
  <p id="textvalue">the image is very beautiful</p>
  <button onclick="changeImage()">Change Current Image</button>
  <button onclick="leftImage()">Left Image</button>
  <button onclick="backgroundImage()">Background Image</button>
  <button onclick="rightImage()">Right Image</button>

  <button onclick="editText()">Edit Text</button>
  <button onclick="changeFontSize()">Change Font Size</button>
  <button onclick="ChangeFontColor()">Change Font Color</button>
  <script>
    function changeImage(){
      document.getElementById("myImage").src = 'third.jpg';
    }

    function leftImage(){
      console.log("hello");
      document.getElementById("myImage").style.marginRight = 10 + "px";
    }

    function backgroundImage(){
      document.body.style.backgroundImage = "url('first.jpg')";
    }

    function rightImage(){
      document.getElementById("myImage").style.marginLeft = 800 + "px";
    }

    function editText(){
      document.getElementById("textvalue").innerHTML = "the world is very beautiful .....";
    }

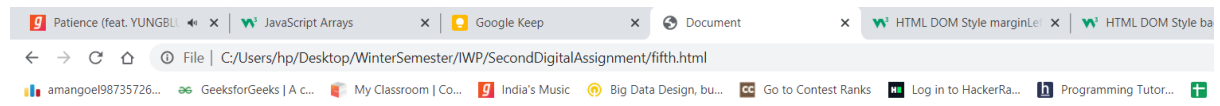
    function changeFontSize(){
      document.getElementById("textvalue").style.fontSize = 50 + "px";
    }

    function ChangeFontColor(){
      document.getElementById("textvalue").style.color = "blue";
    }
  </script>

```

```
</script>
</body>
</html>
```

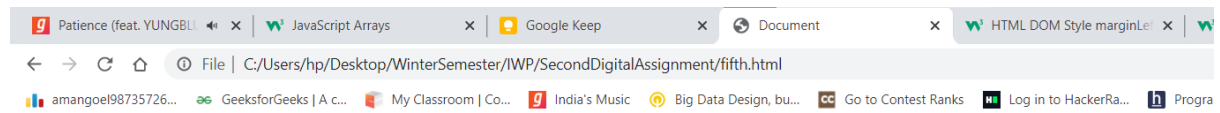
## Output



the image is very beautiful

[Change Current Image](#) [Left Image](#) [Background Image](#) [Right Image](#) [Edit Text](#) [Change Font Size](#) [Change Font Color](#)

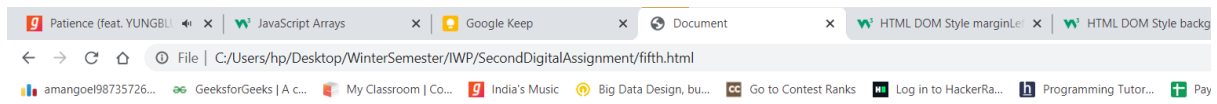
## After pressing change current image



the image is very beautiful

[Change Current Image](#) [Left Image](#) [Background Image](#) [Right Image](#) [Edit Text](#) [Change Font Size](#) [Change Font Color](#)

## After pressing right image button



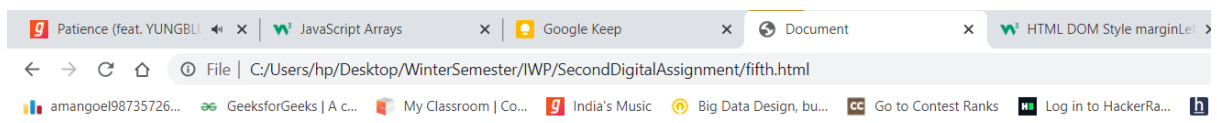
## Online Greetings Designer



the image is very beautiful



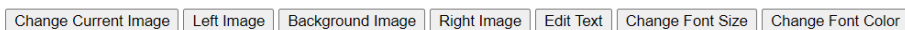
## After pressing edit Text Message



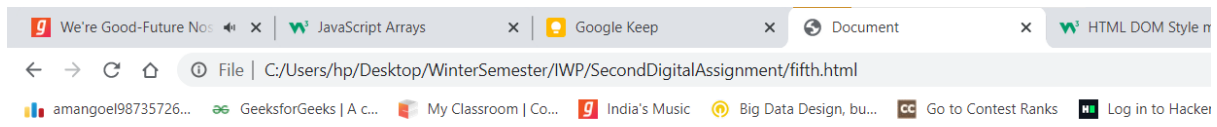
## Online Greetings Designer



the world is very beautiful .....



## After pressing change Font Size Button



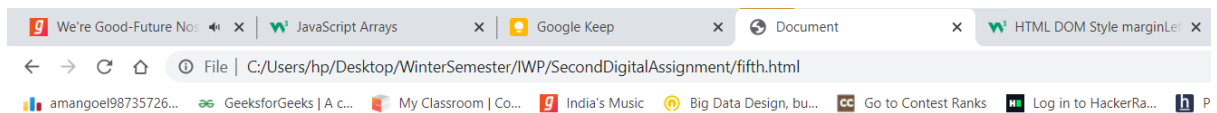
## Online Greetings Designer



the image is very beautiful

[Change Current Image](#) [Left Image](#) [Background Image](#) [Right Image](#) [Edit Text](#) [Change Font Size](#) [Change Font Color](#)

## After pressing change font color button



## Online Greetings Designer



the image is very beautiful

[Change Current Image](#) [Left Image](#) [Background Image](#) [Right Image](#) [Edit Text](#) [Change Font Size](#) [Change Font Color](#)

## Question 9

A parking garage charges a \$2.00 minimum fee to park for up to three hours. The garage charges an additional \$0.50 per hour for each hour or part thereof in excess of three hours. The maximum charge for any given 24-hour period is \$10.00. Assume that no car parks for longer than 24 hours at a time. Write a script that calculates and displays the parking charges for each customer who parked a car in this garage yesterday. You should input from the user the hours parked for each customer. The program should display the charge for the current customer and should calculate and display the running total of yesterday's receipts. The program should use the function calculate-Charges to determine the charge for each customer. Use a text input field to obtain the input from the user

## Code

```
<!--
- A parking garage charges a $2.00 minimum fee to park for up to three hours.
The garage charges an additional $0.50 per
hour for each hour or part thereof in excess of three hours. The maximum charge
for any given 24-hour period is $10.00.
Assume that no car parks for longer than 24 hours at a time. Write a script th
at calculates and displays the parking
charges for each customer who parked a car in this garage yesterday. You shoul
d input from the user the hours parked for
each customer. The program should display the charge for the current customer
and should calculate and display the
running total of yesterday's receipts. The program should use the function cal
culate-Charges to determine the charge for
each customer. Use a text input field to obtain the input from the user -->

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <label for="hourParked">For how many hours the car was parked ??</label>
  <input type="text" id="hourParked">
  <div id="answer"></div>
  <button onclick="calculateCharges()">Compute Result</button>

  <script>
    function calculateCharges(){
      var totalCost = 0;
```

```

        var hoursParked = parseInt(document.getElementById("hourParked").value);

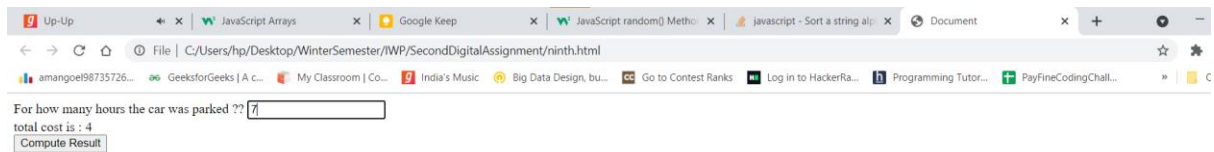
        if(hoursParked <= 3){
            totalCost = 2;
        }
        else{
            totalCost = 2;
            hoursParked -= 3;
            totalCost += (hoursParked * 0.5);
            if(totalCost > 10){
                totalCost = 10;
            }
        }
        document.getElementById("answer").innerHTML = "total cost is : " +
totalCost;
    }
</script>
</body>
</html>

```

## Output

A screenshot of a web browser window. The address bar shows the file path: C:/Users/hp/Desktop/WinterSemester/IWP/SecondDigitalAssignment/ninth.html. The page content includes a form with the text "For how many hours the car was parked ??", an input field containing the number "4", and the text "total cost is : 2.5". Below the input field is a button labeled "Compute Result". The browser's tab bar shows several open tabs, including "Up-Up", "JavaScript Arrays", "Google Keep", "JavaScript random() Method", "javascript - Sort a string alphabetically", and "Document".

A screenshot of a web browser window, similar to the one above. The address bar shows the same file path. The page content shows the form with the text "For how many hours the car was parked ??", an input field containing the number "1", and the text "total cost is : 2". Below the input field is a button labeled "Compute Result". The browser's tab bar shows the same set of open tabs as the previous screenshot.



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## Question 11

11. Develop a word decoder challenge game using HTML, CSS and JavaScript. Present the player with a set of scrambled word & hint and challenge him to unscramble them. For each attempt randomly select a word, refresh the browser window dynamically and display the scrambled word in red. Once the player thinks the word has been properly decoded, he clicks on the Check Answer button to see the results. If the answer is correct, the player is notified via a success message displayed in a popup dialog window or displays a failure message.

---

## Code

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <h2>Scrambled Word Game</h2>

  <br>
  <br>

  <h4>Decode the word : </h4>
  <div id="randomWord"></div>

  <h5>Enter the word after decoding it</h5>
  <input type="text" id="inputValue">

  <button onclick="computeAnswer()">Compute Result</button>

  <script>
```



```

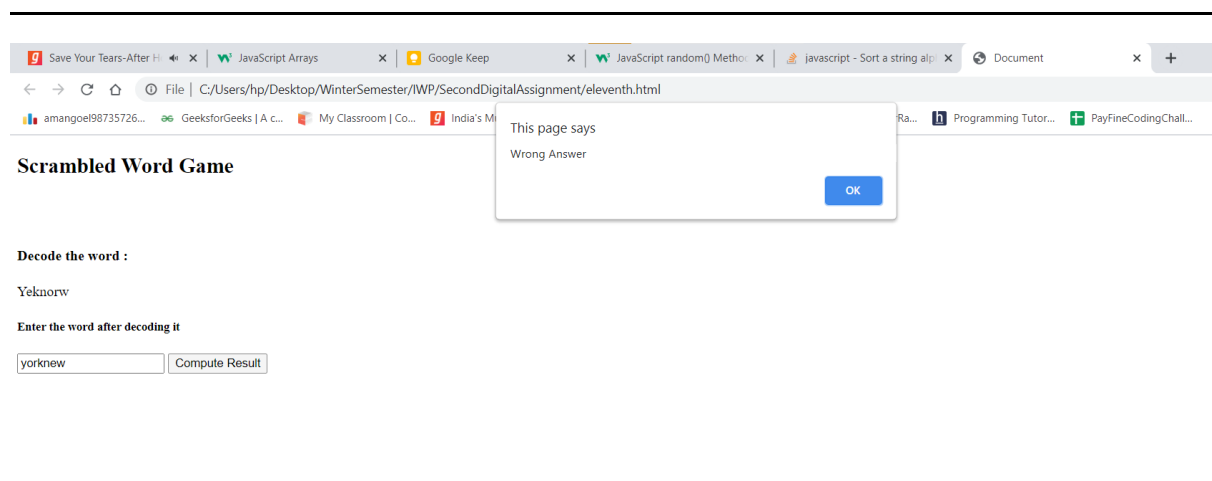
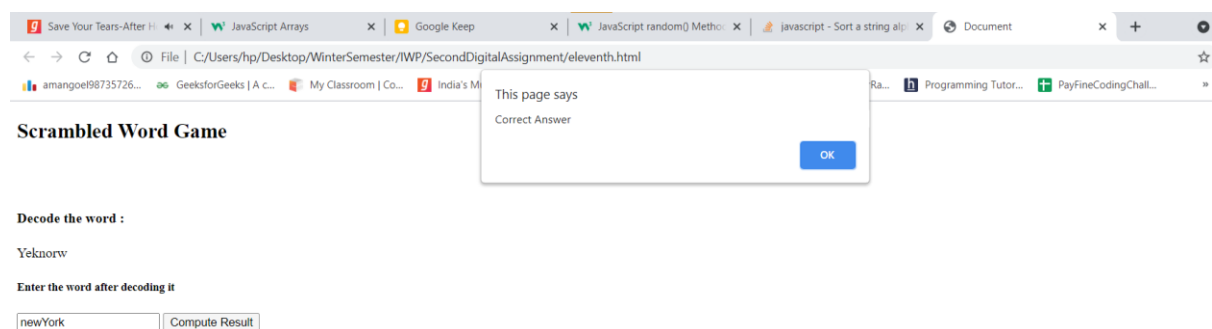
];

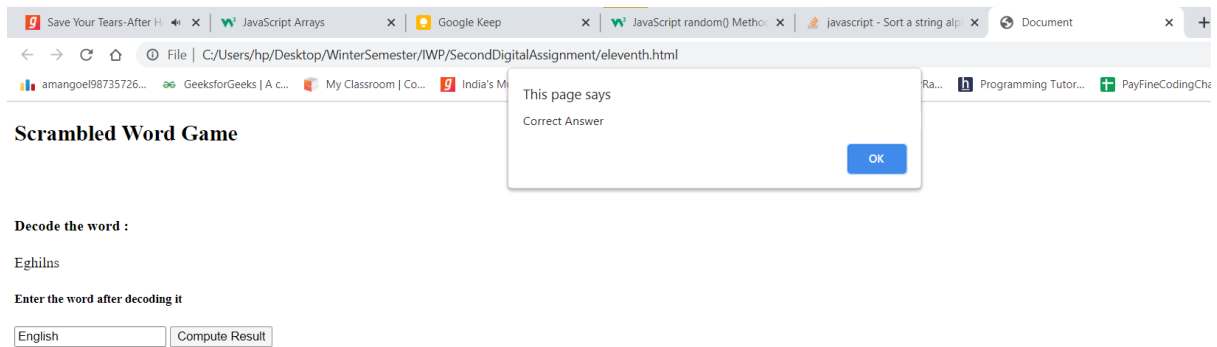
var index = parseInt(Math.random() * words.length);
console.log(index);
document.getElementById("randomWord").innerHTML = words[index].split('
').sort().join('');
console.log("hello");
function computeAnswer(){
    var inputValue = document.getElementById("inputValue").value;
    if(inputValue == words[index]){
        alert("Correct Answer");
    }else{
        alert("Wrong Answer");
    }
}
</script>
</body>

</html>

```

## Output





## Question 12

12. Develop a JavaScript program that will determine whether a department-store customer has exceeded the credit limit on a charge account. For each customer, the following facts are available:

- a) Account number
- b) Balance at the beginning of the month
- c) Total of all items charged by this customer this month
- d) Total of all credits applied to this customer's account this month
- e) Allowed credit limit

The program should input each of these facts from a prompt dialog as an integer, calculate the new balance (= beginning balance + charges – credits), display the new balance and determine whether the new balance exceeds the customer's credit limit. For customers whose credit limit is exceeded, the program should output HTML text that displays the message “Credit limit exceeded.”

```
Account number: 123
Credit limit: 2500
Beginning balance: 1200
Total Expenditures: 200
Total Credit Payments: 300
New Balance: 1100
```

```
Account number: 124
Credit limit: 500
Beginning balance: 300
Total Expenditures: 200
Total Credit Payments: 150
New Balance: 350
```

## Code

```
<!-- Develop a JavaScript program that will determine whether a department-
store
customer has exceeded the credit limit on a charge account. For each customer,
the
following facts are available:
```

- a) Account number
- b) Balance at the beginning of the month
- c) Total of all items charged by this customer this month
- d) Total of all credits applied to this customer's account this month
- e) Allowed credit limit

The program should input each of these facts from a prompt dialog as an integer, calculate the new balance (= beginning balance + charges - credits), display the new

balance and determine whether the new balance exceeds the customer's credit limit.

For customers whose credit limit is exceeded, the program should output HTML text

that displays the message –Credit limit exceeded. -->

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <script>
    function newBalance(){
      var beginingBalance = document.getElementById("balance").value;
      var charges = document.getElementById("totalCost").value;
      var credits = document.getElementById("totalcreditApplied").value;
      var creditLimit = document.getElementById("creditLimit").value;
      var newBalance = beginingBalance + charges - credits;

      if(newBalance > creditLimit){
        document.getElementById("output").innerHTML = "Credit limit Ex
ceed";
      }else{
        document.getElementById("output").innerHTML = "New Balance is
: " + newBalance;
      }
    }
  </script>
</head>

<body>
  <h2>Departmental Store Management System</h2>
  <label for="accountNumber">Account Number</label>
  <br>
  <input type="number" id="accountNumber">
  <br><br>
```

```
<label for="balance">Balance at the begining of the month</label>
<br>
<input type="text" id="balance">
<br><br>
<label for="totalCost">Total of all items charged by this customer this month</label>
<br>
<input type="number" id="totalCost">
<br><br>
<label for="totalcreditApplied">Total of all credits applied to this customer's account this month</label>
<br>
<input type="number" id="totalcreditApplied">
<br><br>
<label for="creditLimit">Allowed Credit Limit</label>
<br>
<input type="number" id="creditLimit">
<button onclick="newBalance()">Click Me</button>
<div id="output"></div>
</body>
</html>
```

## Output

g

Anywhere Away from Here-A

🔊

×

🌐

Document

×

🌐

exceeded

×

⬅️ ➡️ ↺ 🏠

📄 File | C:/Users/hp/Desktop/WinterSemester/IWP/SecondDigital/

🇧🇷 amangoel98735726...

🔗 GeeksforGeeks | A c...

📖 My Classroom | Co...

g India's Music

## Departmental Store Management System

Account Number

234234

Balance at the begining of the month

5000

Total of all items charged by this customer this month

3205

Total of all credits applied to this customer's account this month

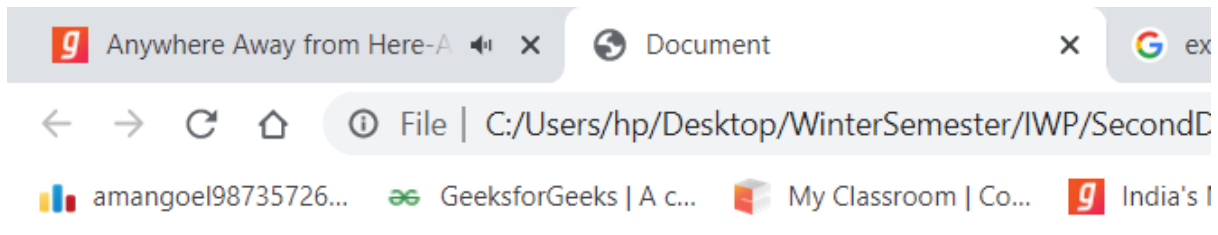
236

Allowed Credit Limit

2301

Click Me

Credit limit Exceed



## Departmental Store Management System

Account Number

Balance at the begining of the month

Total of all items charged by this customer this month

Total of all credits applied to this customer's account this month

Allowed Credit Limit

New Balance is : 202540

### Question 13

Implement an online quiz application. The timer is set for each question .If timer elapses the next question is automatically displayed .Going back to previous question is disabled and going to next question before time should also be possible. The app should display the results of the user at the end of quiz.

### Code

```
<html>

<head>
  <title>"QUIZ"</title>
  <script type="text/javascript">
    function cal() {
```

```

        var x, x1, x2, x3;
        var count = 0;
        x = document.quiz.capital.value;
        if (x == "delhi") {
            count++;
        }
        x1 = document.quiz.continents.value
        if (x1 == "7") {
            count++;
        }
        x2 = document.quiz.oceans.value;
        if (x2 == "5") {
            count++;
        }
        x3 = document.quiz.vizag.value;
        if (x3 == "false") {
            count++;
        }
        alert("YOUR SCORE IS: " + count);
    }
</script>
</head>

<body>
    <form name="quiz" method="GET" action="Quiz.html">
        <h1>"QUIZ1 QUESTIONS"</h1>
        <p><b>1.What is the capital of India?</b></p><br>
        <input type="radio" name="capital" value="mumbai">Mumbai<br><input type="radio" name="capital"
            value="delhi" />Delhi<br>
        <p><b>2.Number of continents in the world?</b></p><br>
        <input type="radio" name="continents" value="7">7<br><input type="radio" name="continents" value="10" />10<br>
        <p><b>3.Number of oceans in the world?</b></p><br>
        <input type="radio" name="oceans" value="5">5<br><input type="radio" name="oceans" value="3" />3<br>
        <p><b>4.Vizag is located in Tamilnadu?</b></p><br>
        <input type="radio" name="vizag" value="true">true<br><input type="radio" name="vizag"
            value="false" />false<br>
        <br><br> <input type="button" onclick="cal();" name="score" value="submit" /><br><br>
        <!--Score: <input type="Text" id="score" /> -->
    </form>
</body>

</html>

```

## Output

javascript.pdf x "QUIZ" x Implement an online quiz applica... x document.pdf x +

File | C:/Users/hp/Desktop/WinterSemester/IWP/SecondDigitalAssignment/thirteen.html

amangoel98735726... GeeksforGeeks | A C... My Classroom | Co... India's N... erRa... h /

## "QUIZ1 QUESTIONS"

1.What is the capital of India?

☐ Mumbai  
☒ Delhi

2.Number of continents in the world?

☒ 7  
☐ 10

3.Number of oceans in the world?

☒ 5  
☐ 3

4.Vizag is located in Tamilnadu?

☒ true  
☐ false

submit

This page says  
YOUR SCORE IS: 3  
OK

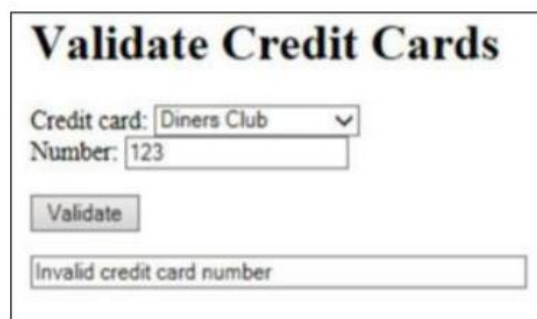
---

## Question 14



14. Create a script that uses regular expressions to validate credit card numbers. Major credit card numbers must be in the following formats:

- American Express—Numbers start with 34 or 37 and consist of 15 digits.
- Diners Club—Numbers begin with 300 through 305, or 36 and 38 and consists of 14 digits .
- Discover—Numbers begin with 6011 or 65 and consist of 16 digits.
- JCB—Numbers beginning with 2131 or 1800 consist of 15 digits, while numbers beginning with 35 consist of 16 digits.
- MasterCard—Numbers start with the numbers 51 through 55 and consist of 16 digits.
- Visa—Numbers start with a 4; new cards consist of 16 digits and old cards consist of 13 digits.



**Validate Credit Cards**

Credit card:

Number:

## Code

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="utf-8">
  <title>JavaScript form validation - checking non-empty</title>
  <style>
  </style>
</head>

<body>
  <div class="mail">
    <h2>Validate Credit Cards</h2>
    <input type='text' name='text1' id="firstinput">

    <label for="card">Choose a credit Card:</label>
    <select id="card" name="card">
      <option value="American">American Express</option>
```

```

        <option value="Diners">Diners</option>
        <option value="Discover">Discover
    </option>
    <option value="JCB">JCB</option>
    <option value="MasterCard">Master Card</option>
    <option value="Visa">Visa</option>
</select>
<button onclick="DecideCompany()"> Click Me</button>

</div>
<script>
    function DecideCompany() {
        inputtxt = document.getElementById("firstinput").value;
        console.log(inputtxt);
        company = document.getElementById("card").value;
        console.log(company);
        console.log("Inside Decide company : ", inputtxt, " company name
: ", company);
        if (company == "American") {
            return AmericanExpress(inputtxt);
        }

        if (company == "Diners") {
            return DinersClub(inputtxt);
        }

        if (company == "Discover") {
            return DiscoverCard(inputtxt);
        }

        if (company == "JCB") {
            return JCB(inputtxt);
        }

        if (company == "MasterCard") {
            return MasterCard(inputtxt);
        }

        if (company == "Visa") {
            return Visa(inputtxt);
        }
    }

    function Visa(inputtxt) {
        var cardno = /^(?:4[0-9]{12}(?:[0-9]{3})?)$/;
        if (inputtxt.match(cardno)) {
            alert("Valid Visa Credit Card Number");
            return;
        }
    }

```

```

    }
    else {
        alert("Not a valid Visa credit card number!");
        return;
    }
}

function AmericanExpress(inputtxt) {
    console.log("hello from america");
    var cardno = /^(?:3[47][0-9]{13})$/;
    if (inputtxt.match(cardno)) {
        alert("Valid American Express Card");
        return;
    }
    else {
        alert("Not a valid Amercican Express credit card number!");
        return;
    }
}

function MasterCard(inputtxt) {
    var cardno = /^(?:5[1-5][0-9]{14})$/;
    if (inputtxt.match(cardno)) {
        alert("valid Mastercard number");
        return;
    }
    else {
        alert("Not a valid Mastercard number!");
        return;
    }
}

function DiscoverCard(inputtxt) {
    var cardno = /^(?:6(?:011|5[0-9][0-9])[0-9]{12})$/;
    if (inputtxt.match(cardno)) {
        alert("valid Discover card number");
        return;
    }
    else {
        alert("Not a valid Discover card number!");
        return;
    }
}

function DinersClub(inputtxt) {
    var cardno = /^(?:3(?:0[0-5]||[68][0-9])[0-9]{11})$/;
    if (inputtxt.match(cardno)) {
        alert("valid Dinners Club card number");
        return;
    }
}

```

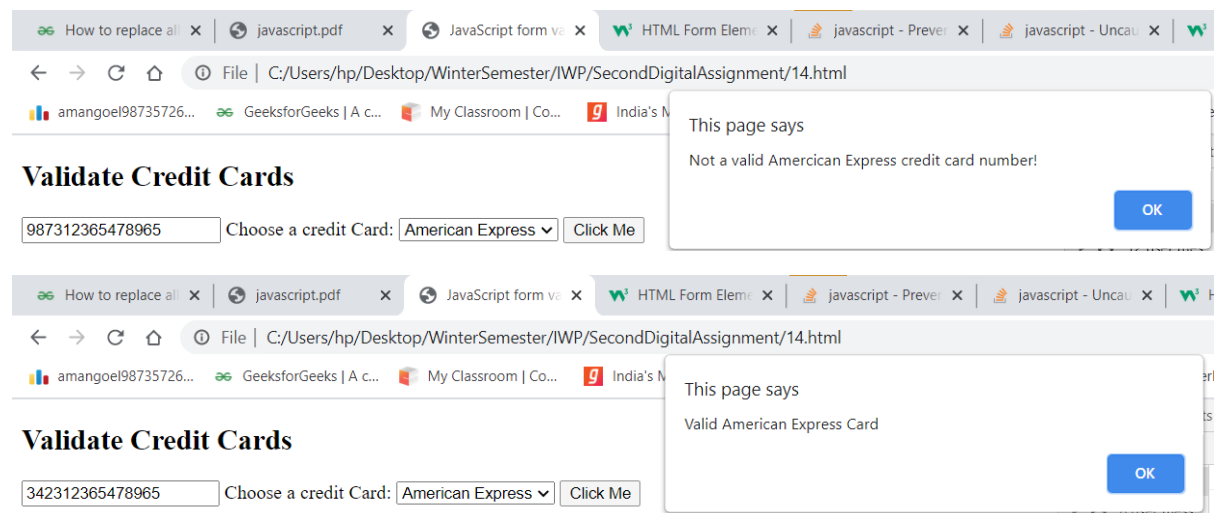
```

        else {
            alert("Not a valid Dinners Club card number!");
            return;
        }
    }

    function JCB(inputtxt) {
        var cardno = /^(?:2131|1800|35\d{3})\d{11}$/;
        if (inputtxt.match(cardno)) {
            alert("valid JCB card number");
            return;
        }
        else {
            alert("Not a valid JCB card number!");
            return;
        }
    }
}
</script>
</body>
</html>

```

## Output



## Question 15

15. Design a table in the format given below using HTML and JQuery selectors. Apply different background for odd and even rows of the table. Apply different CSS for table header using jquery selector.

First Name	Last Name	City	State
Mannix	Bolton	Merizo	Michigan
Suki	King	Fairmont	Oklahoma
Shelby	English	Durham	Arkansas
Portia	Burns	Princeton	Rhode Island
Dacey	Young	Covina	South Carolina
Clark	Reyes	Grand Rapids	New Jersey
Maris	Decker	Sierra Madre	Georgia

## Code

```
<!--
- 15. Design a table in the format given below using HTML and JQuery selectors
.
Apply different background for odd and even rows of the table. Apply different
CSS
for table header using jquery selector. -->

<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <style>
    table,
    th,
    td {
      border: 1px solid black;
    }
  </style>
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min
.js"></script>
</head>

<body>
```

```
<table id="table">
  <tr>
    <th>
      First Name
    </th>
    <th>
      Last Name
    </th>
    <th>
      City
    </th>
    <th>
      State
    </th>
  </tr>

  <tr>
    <td>Mannix</td>
    <td>Bolton</td>
    <td>Merizo</td>
    <td>Michigan</td>
  </tr>
  <tr>
    <td>Suki</td>
    <td>King</td>
    <td>Fairmont</td>
    <td>Oklahoma</td>
  </tr>
  <tr>
    <td>Shelby</td>
    <td>English</td>
    <td>Durham</td>
    <td>Arkansas</td>
  </tr>

  <tr>
    <td>Portia</td>
    <td>Burns</td>
    <td>Princeton</td>
    <td>Rhode Island</td>
  </tr>

  <tr>
    <td>Dacey</td>
    <td>Young</td>
    <td>Covina</td>
    <td>South Carolina</td>
  </tr>
</table>
```

```

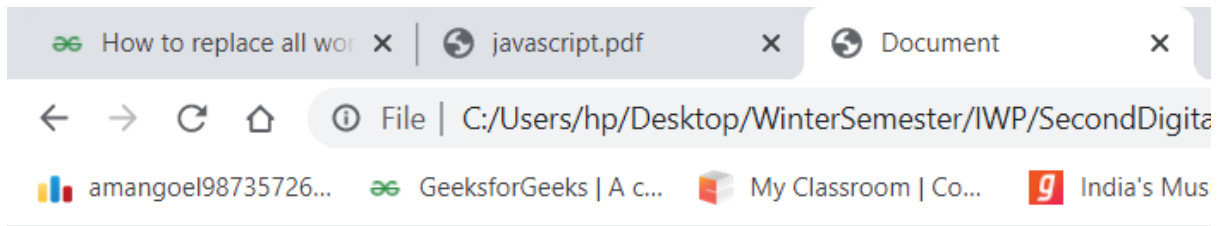
    </tr>
    <tr>
        <td>Clark</td>
        <td>Reyes</td>
        <td>Grand Rapids</td>
        <td>New Jersey</td>
    </tr>

    <tr>
        <td>Maris</td>
        <td>Decker</td>
        <td>Sierra Madre</td>
        <td>Georgia</td>
    </tr>
</table>
<script>
    $("#table tr").css("background-color", function (index) {
        return index % 2 == 0 ? "white" : "lightgrey";
    });

    $("#table th")
        .css({ "color": "black" })
        .filter(":even")
        .css({ "font-size": "25px" });
</script>
</body>
</html>

```

## Output



First Name	Last Name	City	State
Mannix	Bolton	Merizo	Michigan
Suki	King	Fairmont	Oklahoma
Shelby	English	Durham	Arkansas
Portia	Burns	Princeton	Rhode Island
Dacey	Young	Covina	South Carolina
Clark	Reyes	Grand Rapids	New Jersey
Maris	Decker	Sierra Madre	Georgia

## Question 16

16. Design the following web page and write the JQuery code to do the following:

**Blue Cow by Gelett Burgess (published in The Lark, 1895)**

I never saw a **Blue** Cow, I never hope to see one; But I can tell you, anyhow, I'd rather see than be one.

Change the cow's color to:

The desired behaviour of the above page is when the button is clicked, all occurrences of the word **Blue** should be changed to the text specified in the input field. Example - The input field currently has the word **Purple**.

## Solution

### Code

```
<!--  
- 16. Design the following web page and write the JQuery code to do the follow  
ing:  
The desired behaviour of the above page is when the button is clicked, all
```



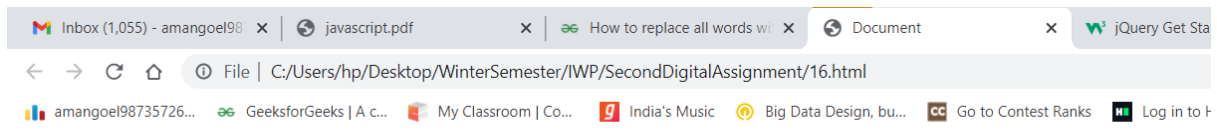
occurrences of the word Blue should be changed to the text specified in the input field. Example - The input field currently has the word Purple. -->

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
  <script>
    function pressed() {
      var val = document.getElementById("colorinput").value;
      document.body.innerHTML
        = document.getElementById("content").innerHTML
          .replaceAll("Blue", val);
    }
  </script>
</head>

<body>
  <div id="content">
    <h1>
      Blue Cow by Gelett Burges (published in the lark , 1895)
    </h1>
    <p>
      i never saw a Blue Cow, I never hope to see one;But i can tell you
      ,anyhow,I'd rather see than be one.
    </p>
    <p>
      Change the cow's color to : <input type="text" id="colorinput" name="color">
      <button onclick="pressed()">Click</button>
    </p>
  </div>
</body>
</html>
```

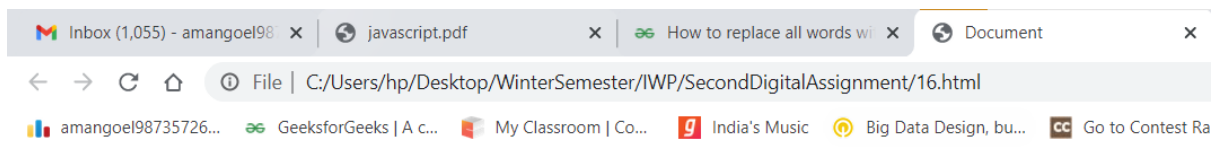
## Output



## Blue Cow by Gelett Burges (published in the lark , 1895)

i never saw a Blue Cow, I never hope to see one;But i can tell you,anyhow,I'd rather see than be one.

Change the cow's color to :



## orange Cow by Gelett Burges (published in the lark , 1895)

i never saw a orange Cow, I never hope to see one;But i can tell you,anyhow,I'd rather see than be one.

Change the cow's color to :