

Aim:

Create a web application using HTML, CSS, JQuery actions.

Description:

The web application will consist of several interactive features implemented using JQuery to enrich the user experience and provide functionality for performing mathematical operations. Here's a breakdown of the key components and their functionalities:

Heading with Blinking Effect:

- The webpage will feature a heading with a distinctive blinking effect to draw attention and add visual interest.
- This effect will be achieved using JQuery's `fadeOut()` and `fadeIn()` functions, creating a seamless transition between visibility states.

Background Color Change:

- A dropdown menu will allow users to select different background colors for the webpage.
- JQuery's `change()` event handler will detect when the user selects a new color option and dynamically adjust the background color accordingly, providing a personalized browsing experience.

Slide Menu Bar:

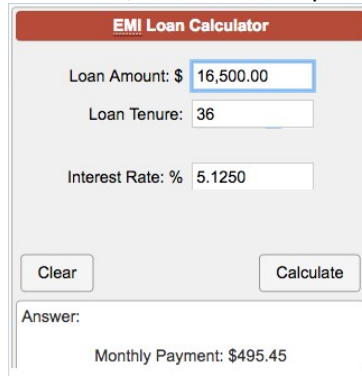
- The webpage will incorporate a slide menu bar for navigation or additional functionalities.
- Users can interact with the menu by sliding it in and out of view, enhancing accessibility and user engagement.
- JQuery will manage the animation and behavior of the slide menu bar, ensuring smooth transitions and responsive design.

Dynamic Object Movement:

- An object displayed on the webpage will be movable, with its position and size changing dynamically.
- Users can interact with this object, dragging it across the screen and resizing it as desired.
- JQuery will handle the object's movement and resizing, updating its properties in real-time to reflect user actions.

Q1: EMI Loan Calculator

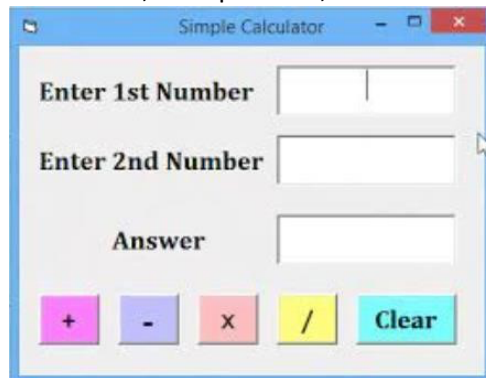
Create a web application to develop the following Bank loan EMI calculator using JQuery. The formula to calculate EMI is $P \times R \times (1+R)^N / [(1+R)^N - 1]$ – where, “P” is the principal loan amount, “N” in tenure in months, and “R” is the prevailing interest rate.



The screenshot shows a web application titled "EMI Loan Calculator" with a red header. It contains three input fields: "Loan Amount: \$" with the value "16,500.00", "Loan Tenure:" with the value "36", and "Interest Rate: %" with the value "5.1250". Below these fields are two buttons: "Clear" and "Calculate". At the bottom, there is an "Answer:" section displaying "Monthly Payment: \$495.45".

Q2: Simple Calculator

Create a web page with JQuery program to perform basic mathematic operations such as addition, subtraction, multiplication, and division for the two given numbers (input from user).



A screenshot of a web application titled "Simple Calculator". It features three input fields: "Enter 1st Number", "Enter 2nd Number", and "Answer". Below the input fields are five buttons: a pink "+" button, a purple "-" button, a red "x" button, a yellow "/" button, and a cyan "Clear" button. The application is displayed in a browser window with standard OS controls.

Q3: Modal window

- 1) Display the heading of the webpage with blinking effect (fadeOut() & fadeIn())
- 2) Change the background color of the webpage based on the dropdown selection (change())
- 3) Design the modal window



A screenshot of a modal window titled "Title - Modal". It has a pink background. At the top, there is a heading "Title - Modal" and a dropdown menu labeled "Select Background Color:" with "green" selected. Below the heading is a white rectangular area containing the text "Modal" and a paragraph of Latin text: "Sed ut perspiciatis unde totam rem aperiam, vitae dicta sunt explicabo." At the bottom of the modal, there is a "Close" button. An "Open" button is located above the modal area.

Q4: Slide menu bar

- 1) Display the heading of the webpage with blinking effect (fadeOut() & fadeIn())
- 2) Change the background color of the webpage based on the dropdown selection (change())
- 3) Design the slide menu bar



Q5: Animation

Move the object with changing its position and size.

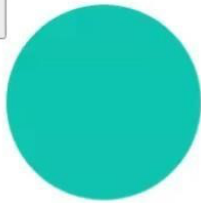


start

Q6: Animation

Move the object with changing its position and size.

Animate



Source Code:

Simple Calculator:

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Simple Calculator</title>
<script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
<style>
body {
    font-family: Arial, sans-serif;
    background-color: #f0f0f0;
}
h2 {
    text-align: center;
}
form {
    max-width:
400px;    margin: 0 auto;
background-color: #fff;
padding: 20px;    border-
radius: 8px;
    box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);
}
input[type="number"], input[type="text"] {
    width: calc(50% - 10px);
padding: 10px;    margin:
5px;    border: 1px solid
#ccc;    border-radius:
4px;
    box-sizing: border-box;
}
button {
    width:
calc(25% - 10px);
padding: 10px;
margin: 5px;    border:
none;    border-radius: 4px;
cursor: pointer;
background-color: #154871;
    color: white;    font-
size: 18px;
    transition: background-color 0.3s;
}
button:hover {
    background-color: #0d97bd;
```

```

    }
    #result {      text-align: left;
        margin-top: 20px;
        font-size: 20px;
    }
    #answer {
        width: calc(50% - 10px);
        padding: 10px;    margin: 5px;
        border: 1px solid #ccc;    border-radius: 4px;
        box-sizing: border-box;
    }
</style>
</head>
<body>

```

```

<h2>Simple Calculator</h2>
<form id="calculatorForm">
    <label for="num1">Enter 1 number</label>
    <input type="number" id="num1">
    <br>
    <label for="num2">Enter 2 number</label>
    <input type="number" id="num2">
    <br>
    <div id="result">Result: <input type="text" id="answer" readonly></div>

    <button type="button" class="operator" data-operation="+">+</button>
    <button type="button" class="operator" data-operation="-">-</button>
    <button type="button" class="operator" data-operation="*">x</button>
    <button type="button" class="operator" data-operation="/">/</button>
    <button type="button" id="clear">Clear</button>
</form>

```

```

<script>
    $(document).ready(function() {
    $('.operator').click(function() {      var num1
= parseFloat($('#num1').val());          var num2
= parseFloat($('#num2').val());          var
operation = $(this).text();

        switch (operation) {
case '+':
            $('#answer').val(num1 + num2);
break;
        case '-':

```

```

        $('#answer').val(num1 - num2);
break;

        case 'x':
            $('#answer').val(num1 * num2);
            break;
case '/':
    if (num2 === 0) {
        alert("Division by zero is not allowed");
return;
    }
    $('#answer').val(num1 / num2);
    break;
    }
});

$('#clear').click(function() {
    $('#num1, #num2, #answer').val("");
});
});
</script>

</body>
</html>

```

Object Moving

```

<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Animation</title>
<style>  body {
margin: 0;    padding: 0;
height: 100vh;
display: flex;    justify-
content: center;    align-
items: center;
    background-color: #f0f0f0;
    }

    #object {    width:
100px;    height: 100px;
background-color: blue;

```

```

position: absolute;    top:
50%;    left: 50%;
    transform: translate(-50%, -50%);
    }

</style>
</head>
<body>

<div id="object"></div>

<script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
<script>
$(document).ready(function() {

    var positionX = 50;
    var positionY = 50;
    var size = 100;

    function animateObject() {    var newPositionX =
    Math.floor(Math.random() * 90);    var newPositionY =
    Math.floor(Math.random() * 90);    var newSize =
    Math.floor(Math.random() * 150) + 50;

        $('#object').animate({
    top: newPositionY + '%',
    left: newPositionX + '%',
    width: newSize,    height:
    newSize
        }, 1000);
    }

    setInterval(animateObject, 2000);
});
</script>

</body>
</html>

```

Slide Menu bar:

```

<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">

```

```
<title>Combined Example</title>
<script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
<style>
body {
    font-family: Arial, sans-serif;
margin: 0;    padding: 0;
    transition: background-color 0.5s ease;
}

.header {    background-
color: #333;    color: #fff;
text-align: center;
padding: 20px 0;
    font-size: 24px;
}

.menu-container {
width: 250px;
height: 100%;
position: fixed;
top: 0;    left: 0;
    background-color: #f4f4f4;
padding: 20px;
    transition: left 0.3s ease;
}

.menu-container ul {    list-
style-type: none;    padding: 0;
}

.menu-container ul li {
padding: 10px 0;
    cursor: pointer;
}

.menu-btn {
position: absolute;
top: 20px;    left:
20px;    cursor:
pointer;
    z-index: 999;
}

.menu-btn i {    font-
size: 24px;
}
```



```
.container {    text-align: center;
margin-top: 100px;
}
```

```
select {
padding: 10px;
font-size: 16px;
}
```

```
h1 {    text-align: center;
margin-top: 100px;    font-size: 36px;
color: #333;
}
```

```
.menu-detail {
display: none;    padding: 10px;    background-color: #ccc;
margin-top: 20px;
}
```

```
.menu-container:hover .menu-detail {
display: block;
}
```

```
.menu-container input[type="checkbox"]:checked + .menu-container ul li label {
color: blue;
}
```

```
#panel, #flip { padding: 5px; text-align: center;
background-color: #e5eccc;
border: solid 1px #c3c3c3;
}
```

```
#panel {
padding: 50px;
display: none;
}
```

```
#panel1, #flip1 { padding: 5px; text-align: center;
background-color: #e5eccc;
border: solid 1px #c3c3c3;
}
```

```
#panel1 {  
padding: 50px;  
display: none;  
}
```

```
#panel2, #flip2 { padding:  
5px; text-align: center;  
background-color: #e5eecc;  
border: solid 1px #c3c3c3;  
}
```

```
#panel2 {  
padding: 50px;  
display: none;  
}
```

```
</style>  
</head>  
<body>
```

```
<div class="container">  
  <h1 id="blinking-heading">Blinking BK Effects</h1>  
  <label for="color-selector">Select Background Color:</label>  
  <select id="color-selector">  
    <option value="white">White</option>  
    <option value="lightblue">Light Blue</option>  
    <option value="lightgreen">Light Green</option>  
    <option value="lightpink">Light Pink</option>  
  </select>  
  <br>  
  <br>  
  <div id="flip">Accordion 1</div>  
  <div id="panel">Hey </div>  
</div>  
  <br>  
  <div id="flip1">Accordion 2</div>  
  <div id="panel1">This is </div>  
</div>  
  <br>  
  <div id="flip2">Accordion 3</div>  
  <div id="panel2">BK's Coding </div>  
</div>  
</div>
```

```

<script>
$(document).ready(function() {
    $('.menu-container ul li').click(function() {
        var id = $(this).attr('id');    $('#'
+ id + '-detail').slideToggle();
    });

    function blinkHeading() {
        $('#blinking-heading').fadeOut(500, function() {
            $(this).fadeIn(500);
        });
    }

    $(document).ready(function() {
    $('.menu-item').click(function() {
    var target = $(this).data('target');
        $('#' + target).slideDown();
    });
});

    setInterval(blinkHeading, 1000);

    $('#color-selector').change(function() {
var selectedColor = $(this).val();
        $('body').css('background-color', selectedColor);
    });

    $(document).ready(function(){
    $("#flip").click(function(){
        $("#panel").slideToggle("slow");
    });
});

$(document).ready(function(){
    $("#flip1").click(function(){
        $("#panel1").slideToggle("slow");
    });
});

$(document).ready(function(){
    $("#flip2").click(function(){
        $("#panel2").slideToggle("slow");
    });
});

});

```

</script>

</body>

</html>

OUTPUT :

SIMPLE CALCULATOR:

Simple Calculator

Enter 1 number

Enter 2 number

Result

+

-

x

/

Clear

SLIDE MENU BAR:

Slide Menu Bar

Slide Menu Bar

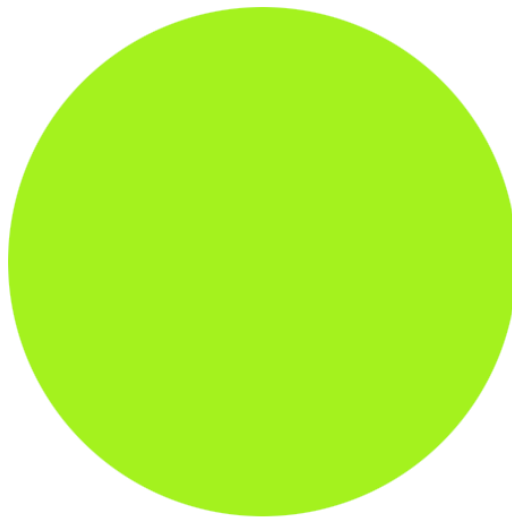
Accordion 2

Accordion 3

MOVING OBJECT:

Animation Example

Start/Stop Animation



RESULT:

Successfully Create a web application using HTML, CSS, JQuery action.