



# VIT<sup>®</sup>

**Vellore Institute of Technology**  
(Deemed to be University under section 3 of UGC Act, 1956)



## Assignment 02

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COURSE: *Ethnus Mern Full Stack certification course*

Q1.

- Write a JavaScript function that reverse a number.
- Sample Data and output:

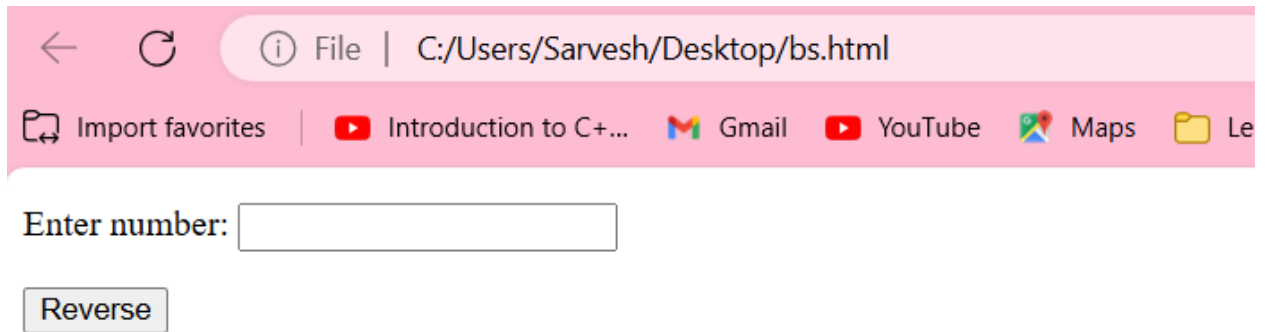
Example x = 32243;

Expected Output : 34223

*Code:*

```
<!DOCTYPE html>
<html>
  <head>
    <title>Task1</title>
  </head>
  <body>
    <p>Enter number:&nbsp;<input type="text" id="num"></p>
    <button type="submit" onclick="cal()">Reverse </button>
    <p id="output"></p>
    <script>
      function cal(){
        let a=document.getElementById("num").value;
        function reverseString(str) {
          return str.split("").reverse().join("");
        }
        let b=reverseString(a);
        document.getElementById("output").innerHTML=b;
      }
    </script>
  </body>
</html>
```

*Output:*

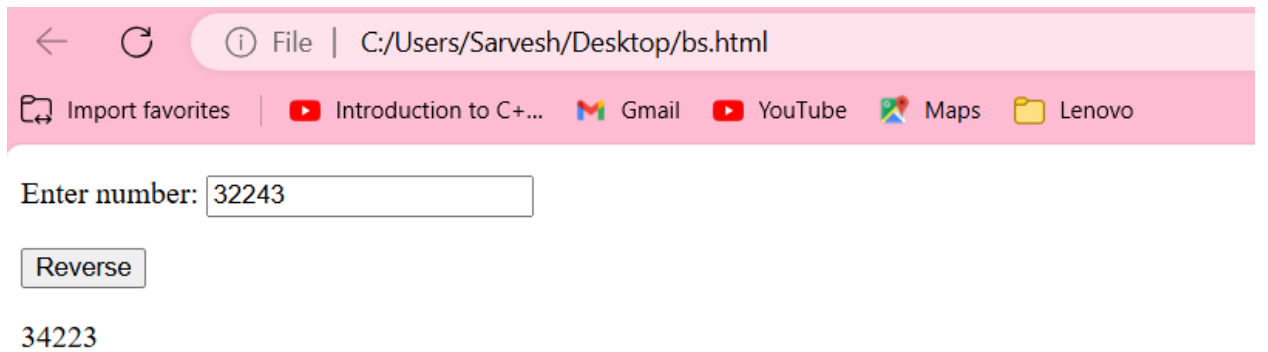


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Enter number:

Reverse



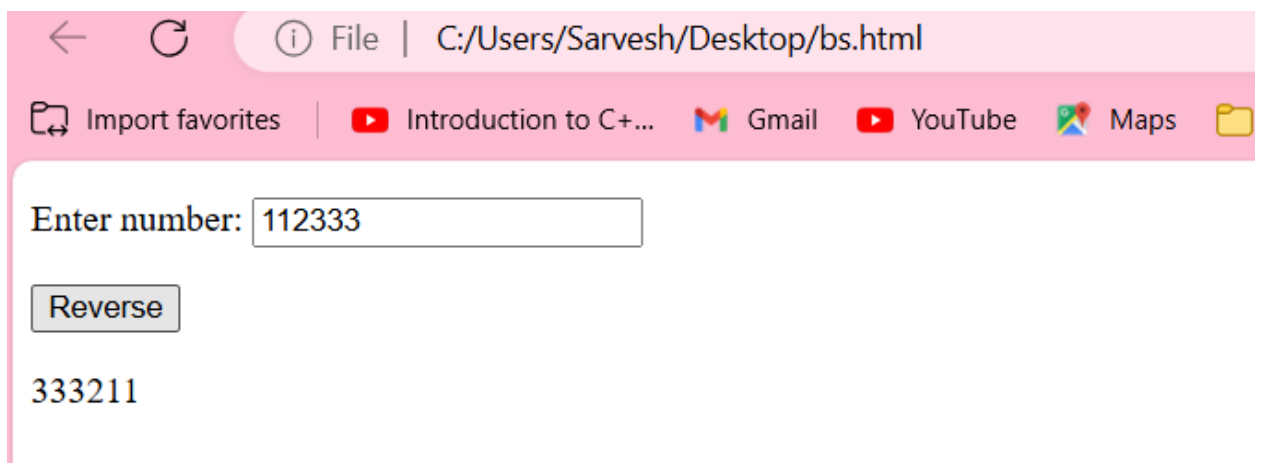
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Enter number:

Reverse

34223



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Enter number:

Reverse

333211

Q2.

- Write a JavaScript function that returns a passed string with letters in alphabetical order.

Example string : 'webmaster'

Expected Output : 'abeemrstw'

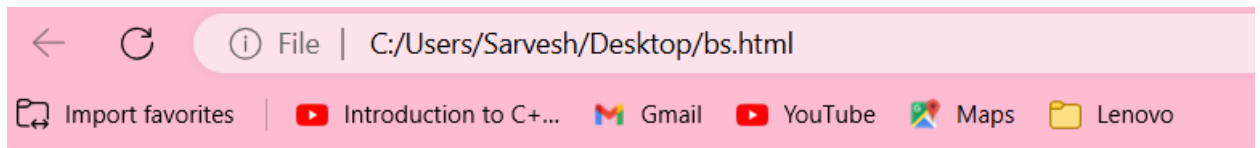
*Code:*

```
<!DOCTYPE html>
<html>
  <head>
    <title>
      Task2
    </title>
  </head>
  <body>
    <p>Enter String:   <input type="text" id="num"></p>
    <button type="submit" onclick="cal()">Alphabetic Order </button>
    <p id="output"></p>
    <script>
      function cal(){
        let a=document.getElementById("num").value;
        function alpha(str) {

          var arr = str.split("");
          res = arr.sort().join("");
          return res;
        }
        let b=alpha(a);
        document.getElementById("output").innerHTML=b;

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

*Output:*



Enter String:

abeemrstw

Q3.

- Write a JavaScript program to calculate multiplication and division of two numbers (input from user).
- Sample Form:

Code:

```
<!DOCTYPE html>
<html>
  <head>
    <title>task 3</title>
    <style>
      .box {
        border: 1px solid black;
        width: 300px;
        padding: 10px;
        padding-bottom: 100px;
      }
    </style>
  </head>
  <body>
    <div class="box">
      <div>1st Number : <input type="text" value="12"></div>
      <div>2nd Number: <input type="text" value="10"></div>
      <div><input type="button" value="Multiply"> <input type="button" value="Divide"></div>
      <div>The Result Is :<br>120</div>
    </div>
  </body>
</html>
```

```

    }
  </style>
</head>
<body>
  <form class="box">
    1st Number :<input type="number" id="a" value><br><br>
    2nd Number:<input type="number" id="b" value><br><br>
    <button onclick="multiply()">Multiply</button>
    <button onclick="divide()">Divide</button>
    <p id="result"></p>
  </form>

  <script>
    function multiply(){
      let a = document.getElementById("a").value;
      let b = document.getElementById("b").value;
      let c = a*b;
      document.getElementById("result").innerHTML=`The Result Is
${c}`;

      event.preventDefault()
    }

    function divide(){
      let a = document.getElementById("a").value;
      let b = document.getElementById("b").value;
      let c = a/b;
      document.getElementById("result").innerHTML=` The Result
Is ${c}`;

      event.preventDefault()
    }
  </script>

</body>

</html>

```

*Output:*

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1st Number :

2nd Number:

The Result Is 120

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1st Number :

2nd Number:

The Result Is 1.2

Q4.

show date

7/March/2023

show Time

Tue Mar 07 2023 23:24:26 GMT+0530 (India Standard Time)

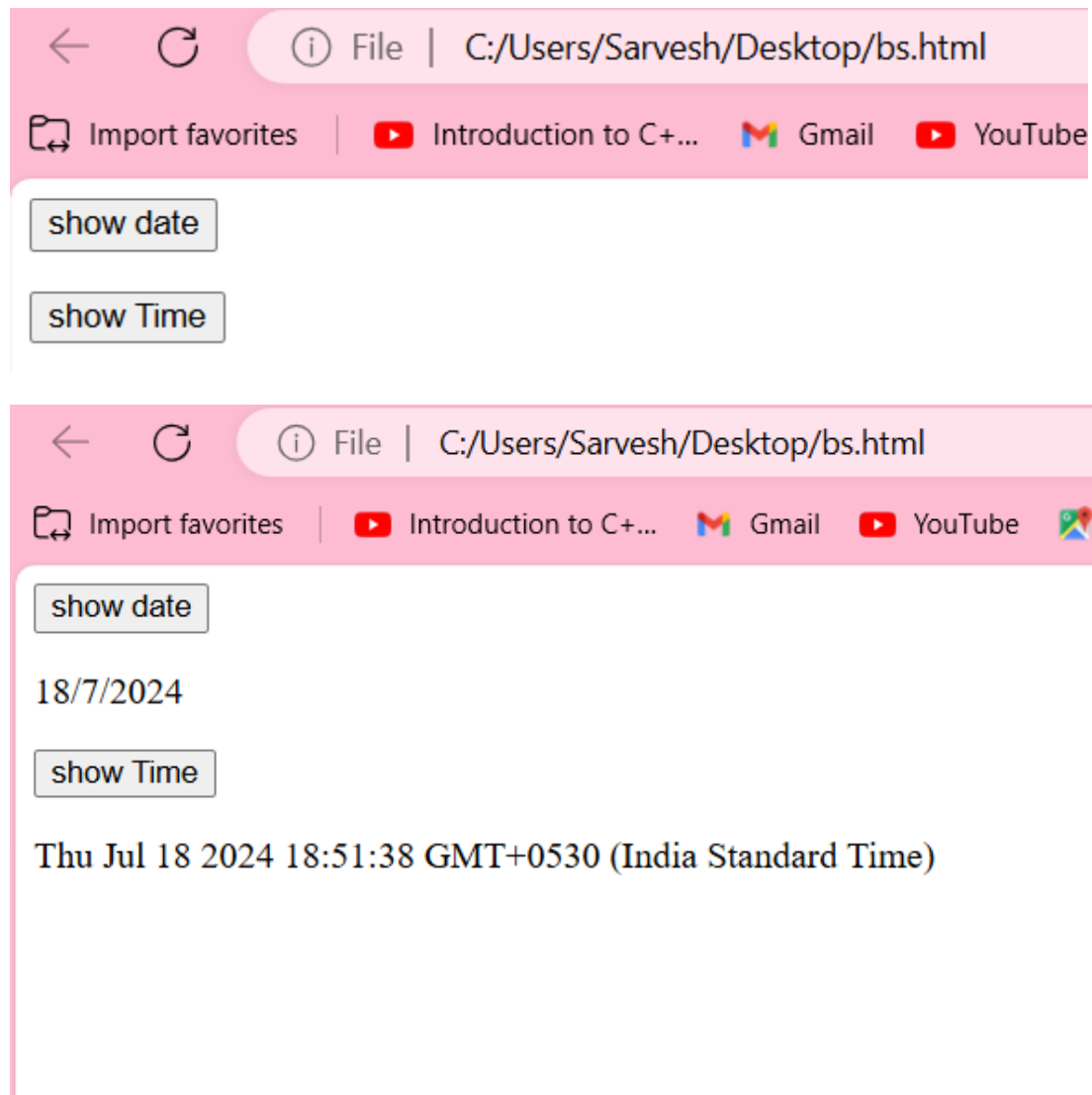
Code:

```
<!DOCTYPE html>
<html>
<head>
  <title>task 4</title>
</head>
<body>
  <button onclick="dates()">show date</button>
  <p id="dated"></p>
  <button onclick="times()">show Time</button>
  <p id="time"></p>
  <script>
    function dates(){
      let date = new Date();
      let formattedDate = date.getDate() + "/" + (date.getMonth() + 1) + "/"
+ date.getFullYear();
      document.getElementById("dated").innerHTML = formattedDate;
    }

    function times(){
      const time=new Date();
      document.getElementById("time").innerHTML = time;
    }
  </script>
</body>
</html>
```



Output:



Q5.

Name:  This field is required

Email:  A valid email address is required

Website:  A valid url is required

Message:  This field is required

Submit

Code:

```
<!DOCTYPE html>
<html>
  <head>
    <title>task 5</title>
    <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css" rel="stylesheet">
  </head>
  <style>
    .container{
      display: flex;
      justify-items: center;
    }

    .input-control input:focus,
    .input-control textarea:focus{
      outline: 0;
    }

    .input-control.error input,
    .input-control.error textarea {
```

```
        border: 4px solid #ff3860;

    }

    .input-control.error .error {

        font-family: 'Times New Roman', Times, serif;
        padding-left: 10px;
        color: #ff3860;
        font-size: 15px;
        height: 13px;
    }

</style>
<script>
    document.addEventListener('DOMContentLoaded', () => {
        const form = document.getElementById("form");
        const name = document.getElementById("name");
        const email = document.getElementById("email");
        const url = document.getElementById("website");
        const mess = document.getElementById("message");

        form.addEventListener('submit', e => {
            e.preventDefault();
            validateInputs();
        });

        const setError = (element, message) => {
            const inputControl = element.parentElement;
            const errorDisplay = inputControl.querySelector('.error');

            errorDisplay.innerText = message;
            inputControl.classList.add('error');
            inputControl.classList.remove('success');
        }
    });
</script>
```

```

const setSuccess = element => {
  const inputControl = element.parentElement;
  const errorDisplay = inputControl.querySelector('.error');

  errorDisplay.innerText = '';
  inputControl.classList.add('success');
  inputControl.classList.remove('error');
}

const isValidEmail = email => {
  const re =
/^(([^<>()[\]\\. ,;: \s@"]+(\.[^<>()[\]\\. ,;: \s@"]+)*)|("[.+")@((\[[0-9]{1,3}\. [0-9]{1,3}\. [0-9]{1,3}\. [0-9]{1,3}\])|(([a-zA-Z\-0-9]+\. )+[a-zA-Z]{2,})))$/;
  return re.test(String(email).toLowerCase());
}

const validateInputs = () =>{
  const namevalue = name.value.trim();
  const mailvalue = email.value.trim();
  const urlvalue = url.value.trim();
  const messvalue = mess.value.trim();

  if(namevalue=== '')
  {
    setError(name, 'This field is required');
  }
  else
  {
    setSuccess(name);
  }

  if(mailvalue=== '')
  {
    setError(email, 'A valid email address is required');
  }
  else if(!isValidEmail(mailvalue))
  {

```

```

        setError(email, 'Provide a valid email address');
    }
    else
    {
        setSuccess(email);
    }

    if(urlvalue==='')
    {
        setError(url, 'A valid url is required');
    }
    else
    {
        setSuccess(url);
    }

    if (messvalue==='')
    {
        setError(mess, 'This field is required')
    }
    else{
        setSuccess(mess);
    }
}
});
</script>
<body>
<div class="container">
    <form class="form justify-content-center" id="form" >
        <div class="input-control d-flex flex-row" >

            <label>Name:</label>
            <input type="text" id="name">
            <div class="error"></div>

        </div><br>

        <div class="input-control d-flex flex-row" >

```

```
        <label>Email:</label>
        <input type="text" id="email" >
        <div class="error"></div>
    </div><br>

    <div class="input-control d-flex flex-row" >
        <label>Website:</label>
        <input type="text" id="website" >
        <div class="error"></div>
    </div><br>

    <div class="input-control d-flex flex-row" >
        <label>Message:</label>
        <textarea type="text" id="message" ></textarea>
        <div class="error"></div>
    </div><br>

    <button type="submit">Submit</button>
</form>
</div>

</body>
</html>
```

*Output:*

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Name:


Email:


Website:

Message:

Q6.

*Instagram*

 Username

 Password

**Log in**

☐ Remember me [Forgot Password?](#)

[Don't have an account! Sign up here.](#)

*Code:*

```
<!DOCTYPE html>
<html>
<head>
  <title>Task 6</title>
  <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css" rel="stylesheet">
```



```

    <link
href='https://fonts.googleapis.com/css2?family=Pacifico&display=swap'
rel="stylesheet">
    <script src="https://kit.fontawesome.com/eb057bb5a5.js"
crossorigin="anonymous"></script>
    <script>
        document.addEventListener('DOMContentLoaded', () => {
            const form = document.getElementById("form");
            const username = document.getElementById("Username");
            const password = document.getElementById("Password");

            form.addEventListener('submit', e => {
                e.preventDefault();
                validateInputs();
            });

            const setError = (element, message) => {
                const inputControl = element.parentElement;
                const errorDisplay =
inputControl.querySelector('.error');

                errorDisplay.innerText = message;
                inputControl.classList.add('error');
                inputControl.classList.remove('success');
            }

            const setSuccess = element => {
                const inputControl = element.parentElement;
                const errorDisplay =
inputControl.querySelector('.error');

                errorDisplay.innerText = '';
                inputControl.classList.add('success');
                inputControl.classList.remove('error');
            }

            const validateInputs = () => {
                const usernameValue = username.value.trim();
                const passwordValue = password.value.trim();

```

```
        if (usernameValue === '') {
            setError(username, 'Give your username');
        } else {
            setSuccess(username);
        }

        if (passwordValue === '') {
            setError(password, 'This field is required');
        } else {
            setSuccess(password);
        }
    }
    });
</script>
</head>
<style>
    .container .c {
        display: flex;
        justify-content: center;
        margin-top: 10%;
        padding-top: 50px;
        background-color: #efefef;
        flex-direction: column;
        width: 400px;
        box-shadow: 0 2px 5px;
        border: 1px solid gray;
    }
    .container a {
        text-decoration: none;
    }
    .subtitle {
        display: flex;
        justify-content: center;
        padding-top: 20px;
        font-size: small;
    }
    .container h1 {
        font-family: 'Pacifico', cursive;
    }
</style>
```

```

        display: flex;
        justify-content: center;
        padding-bottom: 20px;
    }
    .container .form {
        display: flex;
        justify-content: center;
        flex-direction: column;
    }
    .form-group {
        padding-bottom: 20px;
        display: flex;
        justify-content: center;
    }
    .btn {
        width: 75%;
    }
    .error {
        color: red;
        font-size: 0.8em;
        padding-top: 5px;
    }
    .success {
        border-color: green;
    }
</style>
<body>
    <div class="container c">
        <h1 class="fw-lighter">Instagram</h1>
        <form id="form" class="form">
            <div class="form-group">
                <div class="col-9">
                    <div class="input-group">
                        <span class="input-group-text"><i class="fa-solid fa-user"></i></span>
                        <input type="text" class="form-control"
id="Username" placeholder="Username">
                        <div class="error"></div>
                    </div>
                </div>
            </div>
        </form>
    </div>

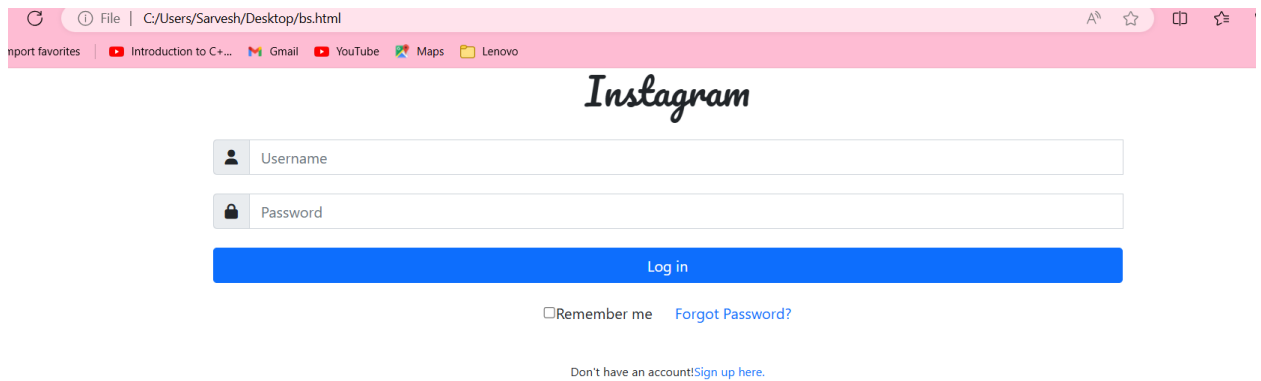
```

```

        </div>
    </div>
    <div class="form-group">
        <div class="col-9">
            <div class="input-group">
                <span class="input-group-text"><i class="fa-
solid fa-lock"></i></span>
                <input type="password" class="form-control"
id="Password" placeholder="Password">
                <div class="error"></div>
            </div>
        </div>
    </div>
    <div class="form-group">
        <button class="btn btn-primary col-10">Log
in</button>
    </div>
    <div class="form-group">
        <span class="pe-4"><input type="checkbox"
class="input-control">Remember me</span>
        <span><a href="#">Forgot Password?</a></span>
    </div>
</form>
<div class="subtitle">
    <span>Don't have an account!<a href="#">Sign up
here.</a></span>
</div>
</div>
</body>
</html>

```

*Output:*



Q7.



**Click the following buttons to handle animation**



*Code:*

```
<!DOCTYPE html>
<html>
<head>
  <title>Task 7</title>
  <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap
p.min.css" rel="stylesheet">
  <link
href='https://fonts.googleapis.com/css2?family=Pacifico&display=swap
' rel="stylesheet">
```

```
<script src="https://kit.fontawesome.com/eb057bb5a5.js"
crossorigin="anonymous"></script>
<style>
    .container {
        display: flex;
        padding-top: 50px;
        font-family: 'Times New Roman', Times, serif;
        flex-direction: column;
        width: 600px;
        color: blue;
    }

    .train {
        position: relative;
    }

    .animate {
        animation: animation1 5s infinite;
    }

    @keyframes animation1 {
        from { left: 0%; }
        to { left: 100%; }
    }
</style>
<script>
    function start() {

document.getElementById('train').classList.add('animate');
    }

    function stop() {

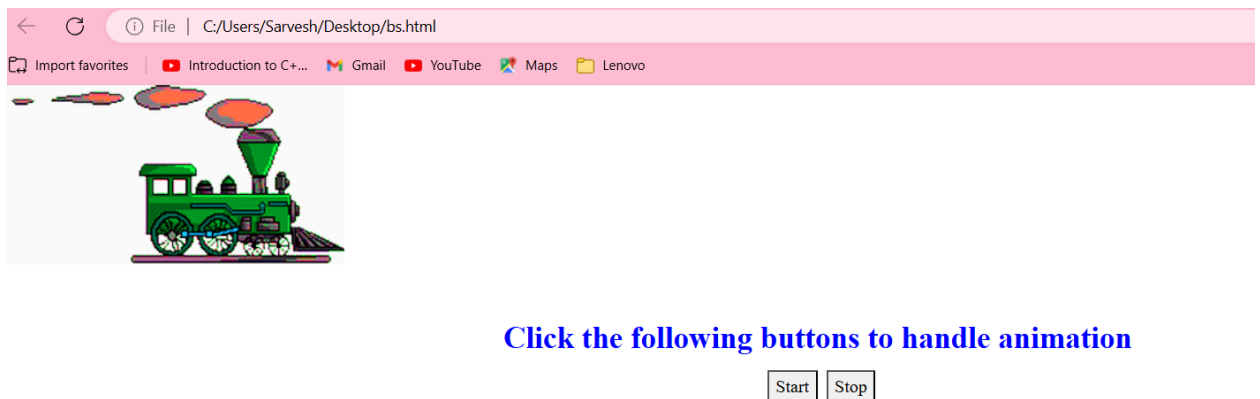
document.getElementById('train').classList.remove('animate');
    }
</script>
</head>
<body>
    <div class="container-block">
```

```

    
    <div class="container">
        <h3 style="font-weight: bold;">Click the following
buttons to handle animation</h3>
        <div class="d-flex flex-col justify-content-center">
            <button class="m-1 d-flex justify-content-center"
onclick="start()">Start</button>
            <button class="m-1 d-flex justify-content-center"
onclick="stop()">Stop</button>
        </div>
    </div>
</div>
</body>
</html>

```

*Output:*



Q8.

## Registration form

First Name	<input type="text"/>	POOR
Last Name	<input type="text"/>	POOR
Email	<input type="text"/>	POOR
Password	<input type="password"/>	POOR
Re-enter Password	<input type="password"/>	POOR OR MISMATCH
Gender	<input checked="" type="radio"/> Male <input type="radio"/> Female	
Age	<input type="text"/>	POOR
Phone Number	<input type="text"/>	POOR
Address	<div style="border: 1px solid #ccc; height: 40px; width: 100%;"></div>	
State	<input type="text"/>	POOR
Country	<input type="text" value="Choose your country"/>	
Languages known	<input type="checkbox"/> English <input type="checkbox"/> Kannada <input type="checkbox"/> Hindi <input type="checkbox"/> Telugu	
<input checked="" type="checkbox"/> Hereby I declare all the given details are true		
Log in to <a href="#">Exhony</a> website		
<div style="background-color: red; color: white; padding: 5px 15px; border-radius: 5px; display: inline-block;">REGISTER</div>		

Code:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-
scale=1.0" />
    <title>task 8</title>
    <style>
      body {
        margin: 0;
```



```
    font-family: Arial, sans-serif;
    display: flex;
    justify-content: center;
    align-items: center;
    height: 100vh;
    background-color: #ffffff;
}
.container {
    background: linear-gradient(to bottom right, #ffcccc,
#ffff99, #cc99ff);
    padding: 20px;
    border-radius: 10px;
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
    width: 90%;
    max-width: 600px;
}
.register-btn {
    background-color: red;
    color: white;
    padding: 10px 20px;
    border: none;
    cursor: pointer;
    border-radius: 20px;
    display: block;
    margin: 10px auto;
    font-size: 16px;
}
.register-btn:hover {
    background-color: darkred;
}
table {
    width: 100%;
}
table td {
    padding: 10px;
}
.error {
    color: red;
    font-size: 12px;
```

```

        margin-left: 10px;
        font-weight: bold;
    }
</style>
</head>
<body>
    <div class="container">
        <h2 style="text-align: center; color: blue">Registration
form</h2>
        <form id="registrationForm">
            <table>
                <tr>
                    <td><b>First Name</b></td>
                    <td>
                        <input type="text" name="firstname" style="width: 80%"
/>
                        <span class="error" id="firstnameError"></span>
                    </td>
                </tr>
                <tr>
                    <td><b>Last Name</b></td>
                    <td>
                        <input type="text" name="lastname" style="width: 80%"
/>
                        <span class="error" id="lastnameError"></span>
                    </td>
                </tr>
                <tr>
                    <td><b>Email</b></td>
                    <td>
                        <input type="email" name="email" style="width: 80%" />
                        <span class="error" id="emailError"></span>
                    </td>
                </tr>
                <tr>
                    <td><b>Password</b></td>
                    <td>
                        <input type="password" name="password" style="width:
80%" />

```

```

        <span class="error" id="passwordError"></span>
    </td>
</tr>
<tr>
    <td><b>Re-enter Password</b></td>
    <td>
        <input type="password" name="repassword" style="width:
80%" />
        <span class="error" id="repasswordError"></span>
    </td>
</tr>
<tr>
    <td><b>Gender</b></td>
    <td>
        <input type="radio" name="gender" value="male" /> Male
        <input type="radio" name="gender" value="female" />
Female
    </td>
</tr>
<tr>
    <td><b>Age</b></td>
    <td>
        <input type="number" name="age" style="width: 80%" />
        <span class="error" id="ageError"></span>
    </td>
</tr>
<tr>
    <td><b>Phone Number</b></td>
    <td>
        <input type="tel" name="phone" style="width: 80%" />
        <span class="error" id="phoneError"></span>
    </td>
</tr>
<tr>
    <td><b>Address</b></td>
    <td>
        <textarea name="address" rows="6" style="width:
80%"></textarea>
        <span class="error" id="addressError"></span>

```

```

        </td>
    </tr>
    <tr>
        <td><b>State</b></td>
        <td>
            <input type="text" name="state" style="width: 80%" />
            <span class="error" id="stateError"></span>
        </td>
    </tr>
    <tr>
        <td><b>Country</b></td>
        <td>
            <select name="country">
                <option value="">Choose your country</option>
                <option value="India">India</option>
                <option value="USA">USA</option>
                <option value="Russia">Russia</option>
                <option value="China">China</option>
            </select>
        </td>
    </tr>
    <tr>
        <td><b>Languages known</b></td>
        <td>
            <input type="checkbox" name="language" value="english" /> English
            <input type="checkbox" name="language" value="kannada" /> Kannada
            <input type="checkbox" name="language" value="hindi" /> Hindi
            <input type="checkbox" name="language" value="telugu" /> Telugu
            <span class="error" id="languageError"></span>
        </td>
    </tr>
    <tr>
        <td colspan="2">
            <input type="checkbox" name="declare" /> Hereby I
            declare all the

```

```

        given details are true
    </td>
</tr>
<tr>
    <td colspan="2" style="text-align: right">
        Log in to
        <a href="https://www.ethnus.com"
target="_blank">Ethnus</a>
        website
    </td>
</tr>
<tr>
    <td colspan="2" style="text-align: center">
        <button type="submit" class="register-
btn">Register</button>
    </td>
</tr>
</table>
</form>
</div>

<script>
    document
        .getElementById("registrationForm")
        .addEventListener("submit", function (event) {
            event.preventDefault();
            let isValid = true;

            const form = event.target;
            const errorElements = form.querySelectorAll(".error");
            errorElements.forEach(
                (errorElement) => (errorElement.textContent = "")
            );
            form.querySelectorAll("input, textarea,
select").forEach((input) => {
                if (!input.value.trim()) {
                    const errorElement = document.getElementById(
                        input.name + "Error"
                    );

```

```
        if (errorElement) {
            errorElement.textContent = "POOR";
        }
        isValid = false;
    }
    });
    if (isValid) {
        form.submit();
    }
    });
</script>
</body>
</html>
```

*Output:*

**First Name**

**Last Name**

**Email**

**Password**

**Re-enter Password**

**Gender**

☐ Male ☐ Female


**Age**

**Phone Number**

**Address**

**State**

**Country**

Choose your country 

**Languages known**

☐ English ☐ Kannada ☐ Hindi ☐ Telugu

☐ Hereby I declare all the given details are true

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