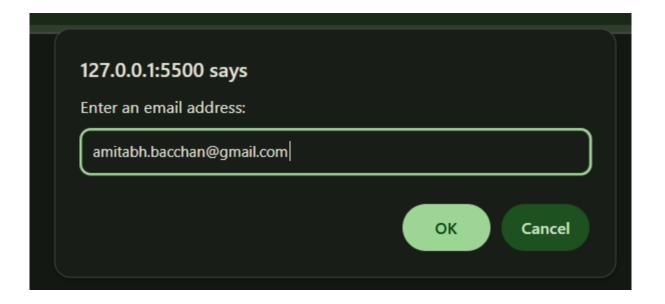Name: Mukund Kuthe

3rd Year Section B (B1)

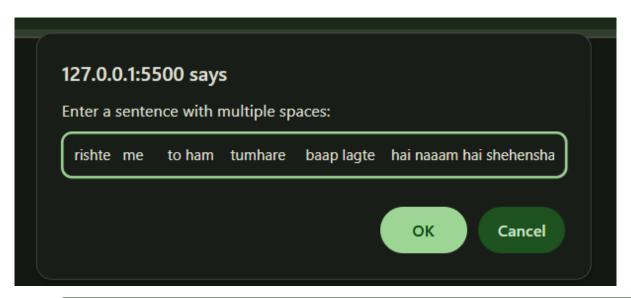Practical 6 (JavaScript)
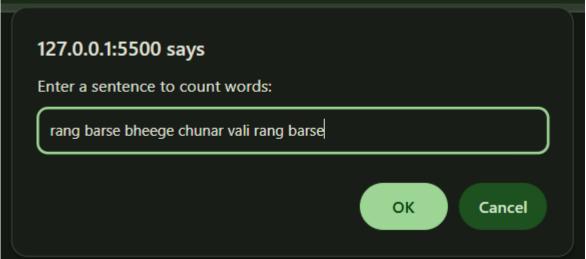
Part 1:

```html
1  <!DOCTYPE html>
2  <html>
3  <head>
4    <title>Practical 6 - String Tasks</title>
5  </head>
6  <body>
7    <script>
8      // Task 1: Name Formatter
9      let nameInput = prompt("Enter a name (e.g. ' jOhN doE '):");
10     let formattedName = nameInput.trim().split(" ").map(word =>
11       word.charAt(0).toUpperCase() + word.slice(1).toLowerCase()
12     ).join(" ");
13     document.write("Formatted Name: " + formattedName + "<br>");
14
15     // Task 2: Reverse a String
16     let str = prompt("Enter a string to reverse:");
17     let reversed = str.split("").reverse().join("");
18     document.write("Reversed String: " + reversed + "<br>");
19
20     // Task 3: Validate Email Address
21     let email = prompt("Enter an email address:");
22     let isValid = /^[A-Za-z0-9._%+-]+@[A-Za-z0-9.-]+\.[A-Za-z]{2,}$/.test(email);
23     document.write("Valid Email: " + isValid + "<br>");
24
25     // Task 4: Replace Multiple Spaces with Single Space
26     let text = prompt("Enter a sentence with multiple spaces:");
27     let singleSpaced = text.replace(/\s+/g, " ");
28     document.write("Cleaned Text: " + singleSpaced + "<br>");
29
30     // Task 5: Word Count
31     let sentence = prompt("Enter a sentence to count words:");
32     let wordCount = sentence.split(" ").length;
33     document.write("Word Count: " + wordCount + "<br>");
34   </script>
35 </body>
36 </html>
37
```

127.0.0.1:5500 says

Enter a name (e.g. ' jOhN doE '):

AMitaBH bACChan

OK   Cancel

127.0.0.1:5500 says

Enter a string to reverse:

Bacchanji

OK   Cancel

127.0.0.1:5500 says

Enter an email address:

amitabh.bacchan@gmail.com

OK   Cancel

Output:

Formatted Name: Amitabh Bacchan
Reversed String: ijnahccaB
Valid Email: true
Cleaned Text: rishte me to ham tumhare baap lagte hai naaam hai shehenshah
Word Count: 7

Part 2:

Task 1:

```html
<!doctype html>
<html lang="en">
<head>
  <meta charset="utf-8">
  <title>Validate Mobile Number</title>
</head>
<body>
  <h2>Validate Mobile Number</h2>
  <input id="mobile" type="text" placeholder="Enter mobile number">
  <button onclick="checkMobile()">Check</button>
  <p id="result"></p>

  <script>
    function checkMobile() {
      const num = document.getElementById('mobile').value.trim();
      const regex = /^[6-9]\d{9}$/;
      document.getElementById('result').textContent = regex.test(num)
        ? '✅ Valid Mobile Number'
        : '❌ Invalid Mobile Number';
    }
  </script>
</body>
</html>
```

Validate Mobile Number

9561971251   Check

✅ Valid Mobile Number

Task 2:

Task2.html > ...

```
1    <!doctype html>
2    <html lang="en">
3    <head>
4      <meta charset="utf-8">
5      <title>Extract Dates</title>
6    </head>
7    <body>
8      <h2>Extract Dates</h2>
9      <textarea id="text" rows="3">Today's date is 12/09/2025 and tomorrow is 13/09/2025</textarea><br>
10     <button onclick="extractDates()">Extract</button>
11     <p id="result"></p>
12
13     <script>
14       function extractDates() {
15         const text = document.getElementById('text').value;
16         const regex = /\b\d{2}\/\d{2}\/\d{4}\b/g;
17         const matches = text.match(regex);
18         document.getElementById('result').textContent = matches ? matches.join(', ') : 'No dates found';
19       }
20     </script>
21   </body>
22   </html>
23
```

Extract Dates

Today's date is
12/09/2025 and
tomorrow is 13/09/2025

Extract

12/09/2025, 13/09/2025

Task 3:

```html
Task3.html > ◈ html
1    <!doctype html>
2    <html lang="en">
3    <head>
4      <meta charset="utf-8">
5      <title>Password Strength Checker</title>
6    </head>
7    <body>
8      <h2>Password Strength Checker</h2>
9      <input id="pwd" type="text" placeholder="Enter password">
10     <button onclick="checkPassword()">Check</button>
11     <p id="result"></p>
12
13     <script>
14       function checkPassword() {
15         const pwd = document.getElementById('pwd').value;
16         const errors = [];
17
18         if (pwd.length < 8) errors.push("❌ Must be at least 8 characters");
19         if (!/[A-Z]/.test(pwd)) errors.push("❌ Must contain an uppercase letter");
20         if (!/[a-z]/.test(pwd)) errors.push("❌ Must contain a lowercase letter");
21         if (!/\d/.test(pwd)) errors.push("❌ Must contain a digit");
22         if (!/[@$!%*?&]/.test(pwd)) errors.push("❌ Must contain a special char (@$!%*?&)");
23
24         document.getElementById('result').innerHTML =
25           errors.length === 0
26           ? "✅ Strong Password"
27           : errors.join("<br>");
28       }
29     </script>
30   </body>
31   </html>
32
```

← → C ⓘ 127.0.0.1:5500/Task3.html

Password Strength Checker

@Arusblhgdkjhfb.kjegf2   Check

✅ Strong Password

Task 4:

```
Task4.html > ...
  1   <!doctype html>
  2   <html lang="en">
  3   <head>
  4     <meta charset="utf-8">
  5     <title>Find Duplicate Words</title>
  6   </head>
  7   <body>
  8     <h2>Find Duplicate Words</h2>
  9     <input id="text" type="text" value="This is is a test test"><br><br>
 10     <button onclick="findDuplicates()">Find</button>
 11     <p id="result"></p>
 12
 13     <script>
 14       function findDuplicates() {
 15         const text = document.getElementById('text').value;
 16         const regex = /\b(\w+)\s+\1\b/gi;
 17         let matches = [], m;
 18         while ((m = regex.exec(text)) !== null) matches.push(m[1]);
 19         document.getElementById('result').textContent = matches.length ? matches.join(', ') : 'No duplicates';
 20       }
 21     </script>
 22   </body>
 23   </html>
 24   |
```

Find Duplicate Words

hi hi helo helo

Find

hi, helo

Task 5:

```
Task5.html > ...
  1   <!doctype html>
  2   <html lang="en">
  3   <head>
  4     <meta charset="utf-8">
  5     <title>Extract Hashtags</title>
  6   </head>
  7   <body>
  8     <h2>Extract Hashtags</h2>
  9     <input id="text" type="text" value="Learning #JS is #fun and #exciting"><br><br>
 10     <button onclick="extractHashtags()">Extract</button>
 11     <p id="result"></p>
 12
 13     <script>
 14       function extractHashtags() {
 15         const text = document.getElementById('text').value;
 16         const regex = /#[A-Za-z0-9_]+/g;
 17         const matches = text.match(regex);
 18         document.getElementById('result').textContent = matches ? matches.join(', ') : 'No hashtags found';
 19       }
 20     </script>
 21   </body>
 22   </html>
 23   |
```

Extract Hashtags

Learning #JS is #fun an

Extract

#JS, #fun, #exciting