



Introduction to Information Systems

- Understanding the digital world

8 Javascript and HTML

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Schedule

Schedule: **1** What is in a Computer, **2** Bit, Bytes and Representation of Information, **3** Inside the CPU, **4** Programming, **5** Algorithms, Programming and Programming Languages, **6** Programming with Python and Scratch, **7** Operating System and Software Systems, **8 Javascript and HTML**, **9 Communication and Networks**, **10 The Internet**, **11 Data and Information**, **12 Privacy and Security**, **13 The World-Wide Web (WWW), HTML, and Wiki**, **14 Artificial Intelligence (AI) and the Future of Computing**, **15 The Future of Information System and Overall Review**



Today's schedule

- **HTML Introduction (35')**
- **Javascript (50')**
- **Information and homework (5')**

HTML Introduction



<https://www.w3schools.com/videos/index.php> (5')



https://www.w3schools.com/html/html_intro.asp -> HOME,
Introduction, Editors, Basic (25')



Try the online editor (5'):

https://www.w3schools.com/html/tryit.asp?filename=tryhtml_intro

Javascript Introduction



https://www.youtube.com/watch?v=Ukg_U3CnJWI (12')

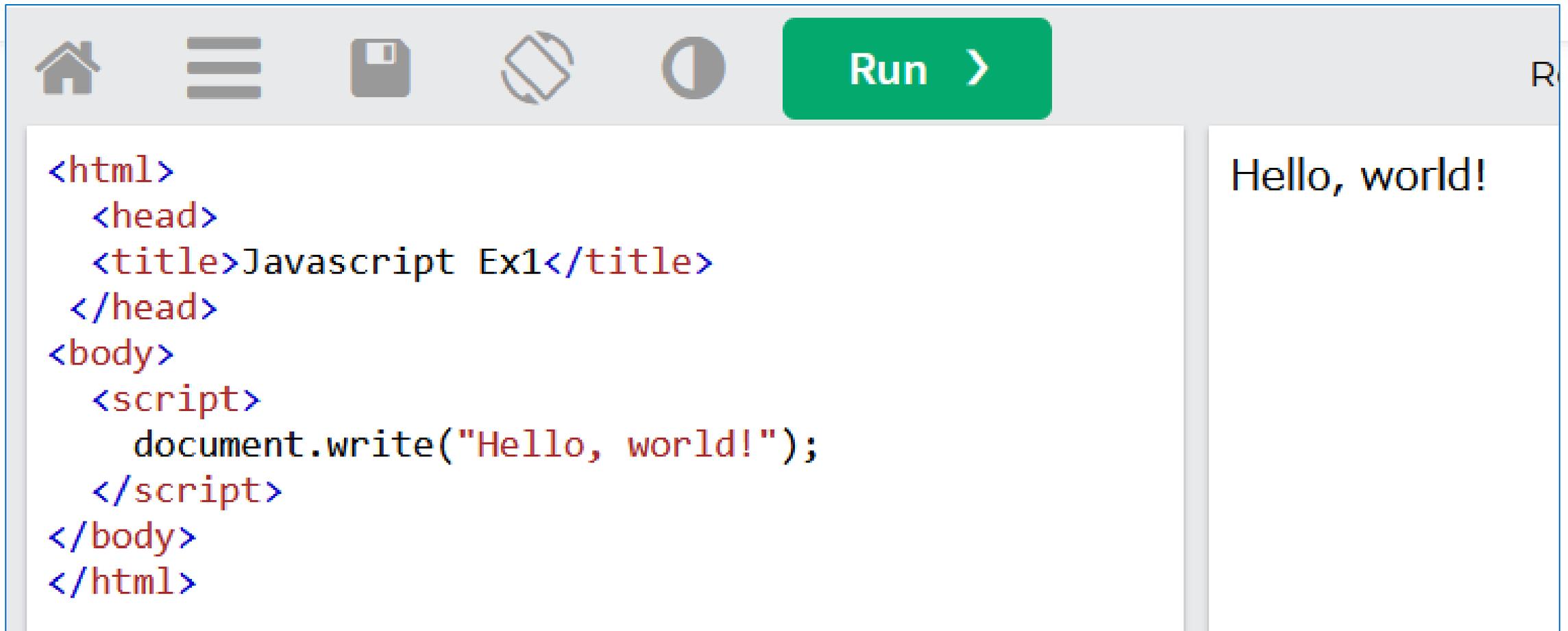
Javascript exercise: hello

```
<html>
  <body>
    <script>
      alert("Hello, world." ) ;
    </script>
  </body>
</html>
```



Access https://www.w3schools.com/js/tryit.asp?filename=tryjs_myfirst. Clear the existing code and input the above code in the left windows. Then run it by clicking the "Run >" button.

ex1

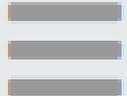


The image shows a code editor interface. At the top, there is a toolbar with icons for home, menu, save, refresh, and a dark mode toggle. A prominent green button labeled "Run" with a right-pointing arrow is also visible. Below the toolbar, the code editor displays the following HTML and JavaScript code:

```
<html>
  <head>
    <title>Javascript Ex1</title>
  </head>
<body>
  <script>
    document.write("Hello, world!");
  </script>
</body>
</html>
```

To the right of the code editor, the output of the code is displayed as "Hello, world!".

ex2



Run >

```
<html>
  <head><title>Javascript Ex2</title></head>
<body>
  <script>
    var name = prompt("What is your name?");
    var sentence = "Hello, " + name + ".";
    document.write(sentence);
  </script>
</body>
</html>
```

Hello, Z.

ex3

```

<html>
  <head><title>Javascript Ex3</title></head>
<body>
  <script>
    n = prompt("Enter a number please:");
    for (i=1; i<=n; i=i+1) {
      for (j=1; j<=i; j=j+1) { document.write("*"); }
      document.write("<br>");
    }
  </script>
</body>
</html>

```

```

*
**
***
****
*****
*****
*****
*****
*****
*****
*****

```

Classwork (ex4)

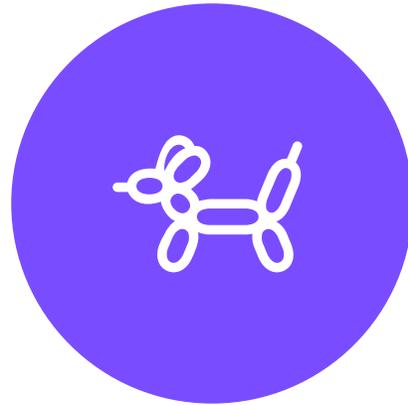
Write a javascript program that reads an integer N from the user, calculates $1 + 2 + \dots + N$, and outputs the result (see the next screenshot for a hint).

The screenshot shows a web browser interface with a code editor on the left and a result display on the right. The code editor contains the following HTML and JavaScript code:

```
<html>
  <body>
    <script>
      // Prompt the user for a number
      var number = prompt("Input a number please:");
      // Calculate the sum of integers from 1 to N
      var sum = 0;
      for (var i = 1; i <= number; i++) {
        sum += i;
      }
      // Output the result
      document.write("1 + ... + " + number + " = " + sum);
    </script>
  </body>
</html>
```

The result display shows the output: $1 + \dots + 100 = 5050$. A modal dialog box is open in the foreground, displaying the prompt "Input a number please:" and the input field containing the value "100". The dialog has "OK" and "キャンセル" (Cancel) buttons.

Information and homework



THIS WEEK, NONE.