

Comp 125 - Visual Information Processing

Spring Semester 2018 - week 5 - monday

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Fun exercise - using variables and operators

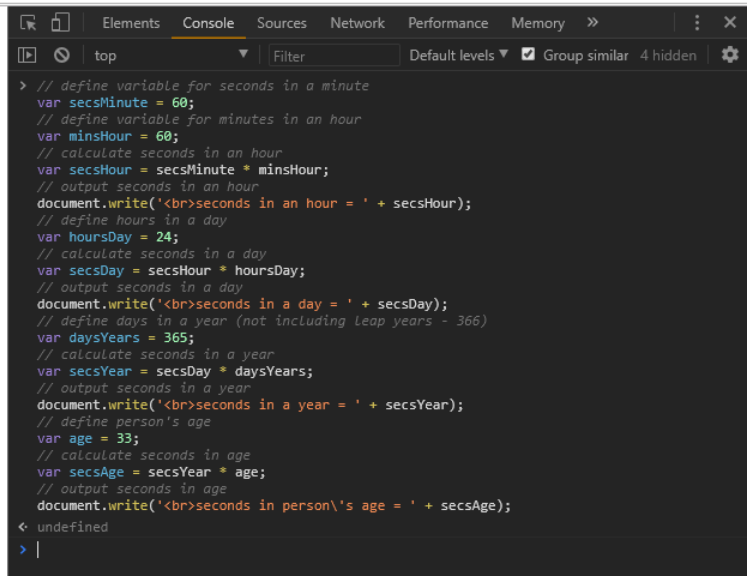
- calculate the **number of seconds in an hour**
- using the **number of seconds in an hour**, calculate the **number of seconds in a day**
- using **number of seconds in a day**, calculate the **number of seconds in a year**
- using **number of seconds in a year**, calculate the **number of seconds in your current age** in years, e.g. 22 years

Output each answer to the document with a line break between each result.

Fun exercise - using variables and operators

one possible answer using current notes...

```
seconds in an hour = 3600  
seconds in a day = 86400  
seconds in a year = 31536000  
seconds in person's age = 1040688000
```



```
> // define variable for seconds in a minute  
var secsMinute = 60;  
// define variable for minutes in an hour  
var minsHour = 60;  
// calculate seconds in an hour  
var secsHour = secsMinute * minsHour;  
// output seconds in an hour  
document.write('<br>seconds in an hour = ' + secsHour);  
// define hours in a day  
var hoursDay = 24;  
// calculate seconds in a day  
var secsDay = secsHour * hoursDay;  
// output seconds in a day  
document.write('<br>seconds in a day = ' + secsDay);  
// define days in a year (not including leap years - 366)  
var daysYears = 365;  
// calculate seconds in a year  
var secsYear = secsDay * daysYears;  
// output seconds in a year  
document.write('<br>seconds in a year = ' + secsYear);  
// define person's age  
var age = 33;  
// calculate seconds in age  
var secsAge = secsYear * age;  
// output seconds in age  
document.write('<br>seconds in person's age = ' + secsAge);  
< undefined  
> |
```

Fun Exercise - using variables and operators

HTML Basics - <body> - part I

intro

- to define the main body of the web page we use the <body> element
- headings can be created using variants of
 - <h1>, <h2>.....<h6>
- we can now add some simple text in a <p> element

```
<p>...</p>
```

- add a line break using the
 element
 -
 for strict XHTML void
- <hr> element adds a horizontal line
 - <hr /> for strict XHTML void
 - implies rendering division
 - instead of defined structural divide...
- comments can also be added through our HTML

```
<!-- comment... -->
```

HTML Basics - <body> - part 2

linking

- linking is an inevitable part of web design and HTML usage
- can be considered within three different contexts
 - *linking to an external site*
 - *linking to another page within the same site*
 - *linking different parts of the same page*
- add links to text and images within the HTML
- <a> element for links plus required attributes, e.g.

```
<!-- external link -->
<a href="http://www.google.com/">Google</a>
<!-- email link -->
<a href="mailto:name@email.com">Email</a>
<!-- internal page link -->
<a href="another_page.html">another page</a>
<!-- define internal anchor - using name attribute -->
<a name="anchor">Internal anchor</a>
<!-- define internal anchor - using ID attribute -->
<a id="anchor">Anchor</a>
<!-- internal anchor link -->
<a href="#anchor">Visit internal anchor</a>
<!-- internal anchor link on another page -->
<a href="/another_page.html#anchor">Visit internal anchor</a>
<!-- internal anchor link on a page on an external site -->
<a href="https://www.test.com/test.html#anchor">Visit internal anchor on external site</a>
```

- Demo - HTML - Internal Anchor

HTML Basics - <body> - part 3

linking - cont'd

- standard attributes supported by <a> element include
 - *class, id, lang, style, title...*
- optional attributes are available for <a> element including
 - *target, href, name...*
- target attribute specifies where the link will be opened relative to the current browser window
- possible attribute values include

```
<!-- open link in new window or tab -->
_blank
<!-- same frame -->
_self
<!-- open within parent frameset -->
_parent
<!-- open in the same window -->
_top
```

HTML Basics - <body> - part 4

images

- allows us to embed an image within a web page
- element requires a minimum *src* attribute

```


```

- other optional attributes include
 - *class, id, alt, title, width, height...*
- use images as links
- image maps

```
<map name="textmap">
  <area shape="rect" coords="..." alt="Quote 1" href="notes1.html" />
</map>
```

HTML Basics - <body> - part 5

tables

- organise data within a table starting with the <table> element
- three primary child elements include
 - *table row, table header, table data*
 - <tr>, <th>, <td>

```
<table>
  <caption>424 - basic test table</caption>
  <tr>
    <th>heading 1</th>
    <th>heading 2</th>
  </tr>
  <tr>
    <td>row 1, cell 1</td>
    <td>row 2, cell 2</td>
  </tr>
</table>
```

- also add a <caption>
- span multiple columns using the colspan attribute
- span multiple rows using the rowspan attribute

HTML Basics - <body> - part 6

lists

- unordered list , ordered list , definition list <dl>
- and contains list items

```
<ul>
  <li>...</li>
</ul>
```

```
<ol>
  <li></li>
</ol>
```

- definition list uses <dt> for the item, and <dd> for the definition

```
<dl>
  <dt>Game 1</dt>
  <dd>our definition</dd>
</dl>
```

HTML Basics - <body> - part 7

forms

- used to capture data input by a user, which can then be processed by the server
- <form> element acts as the parent wrapper for a form
- <input> element for user input includes options using the *type* attribute
 - *text, password, radio, checkbox, submit*

```
<form>
  Text field: <input type="text" name="textfield" />
</form>
```

- process forms using
 - e.g. *JavaScript...*