AP Computer Science Principles
Ticket Out the Door
Set 18: The Document Object Model

Name _____ Period _____

Skill 21.01 Exercise 1
Draw a DOM tree to represent the html document below

Index.html	DOM tree
| ```
<!DOCTYPE html>
<html>
  <head>
  <title>About Me</title>
  </head>
  <body>
    <h1> My Hobbies </h1>
    <h2> Soccer </h2>
    <h4> 5 years </h4>
  </body>
</html>
``` | |

Skill 21.02 Exercise 1
Draw a DOM tree to represent the html document below. In the DOM tree diagram, indicate the parent-child relationship for each element.

| ```
<!DOCTYPE html>
<html>
  <head>
    <script src = "App.js"
defer></script>
    <title>About Me</title>
  </head>
  <body>
      <h1> My Hobbies </h1>
      <div id = "sports">
          <h2>Soccer</h2>
          <h4>5 years</h4>
          <h2>Swimming</h2>
          <h4>2 years</h4>
      </div>
  </body>
</html>
``` | |

Skill 21.03 Exercise 1

Indicate what is printed to the console

Index.html	App.js
| ```html
<!DOCTYPE html>
<html>
  <head>
  <script src = "App.js"
defer></script>
  <title>About Me</title>
  </head>
  <body>
    <h1> My Hobbies </h1>
    <div id = "sports">
        <h2>Soccer</h2>
        <h4>5 years</h4>
        <h2>Swimming</h2>
        <h4>2 years</h4>
    </div>
  </body>
</html>
``` | (a)<br>```js
var h = document.head;
console.log(h);
``` |
| | (b)<br>```js
var d = document.body;
var p = d.firstElementChild;
console.log(p);
``` |
| | (c)<br>```js
var sports = document.getElementById("sports");
console.log(sports.children);
``` |
| | (d)<br>```js
var s =
document.getElementById("sports").firstElementChild;
console.log(s);
``` |

Skill 21.04 Exercise 1

(a) Indicate what the page looks like after the following javascript is applied.

(b) The elements with id = time, do not display as expected. Fix the code so they display properly.

Index.html	App.js
| ```html
<!DOCTYPE html>
<html>
  <head>
  <script src = "App.js" defer></script>
  <title>About Me</title>
  </head>
  <body>
    <h1 id = "about"> About Me </h1>
    <h2 id = "sport"> Soccer </h2>
    <h4 id = "time"> 5 years </h4>
    <h2 id = "hobbie">Baking</h2>
    <h4 id = "time"> 10 years </h4>
    <h2 id = "pet">Cat</h2>
    <h4 id = "time"> 6 years </h4>
  </body>
</html>
``` | ```js
document.getElementById("sport").innerHTML
= "Softball";

document.getElementById("time").innerHTML
= "3 years";

document.getElementById("about").innerHTML
= "Wigglesworth";

var p2 = document.getElementById("pet");
p2.innerHTML = "Gecko";
``` |