HTML TABLES

- Tables are defined with the **<table>** tag.
- Tables are divided into table rows with the **<tr>** tag.
- Table rows are divided into table data with the **<td>** tag.
- Example

```
<table style="width:200px">
  <tr>
    <td>Jill</td>
    <td>Smith</td>

  </tr>
  <tr>
    <td>Eve</td>
    <td>Jackson</td>

  </tr>
</table>
```

TABLE ATTRIBUTES

- Border: Specifies the width of the table border.

    Example: <table border="1"> (adds a 1px border around the table).

- Cellspacing: Defines the space between the cells in the table.

    Example: <table cellspacing="10"> (adds 10px of space between cells).

- Cellpadding: Specifies the space between the content of a cell and its border.

    Example: <table cellpadding="15"> (adds 15px of padding inside each cell).

- Width: Sets the width of the table.

    Example: <table width="500"> (sets the table width to 500 pixels).

- Height: Specifies the height of the table.

    Example: <table height="300"> (sets the height of the table to 300 pixels).

- Align: Aligns the table horizontally.

    Example: <table align="center"> (centers the table on the page).

(TABLE ROW) ELEMENT ATTRIBUTES:

- **align**: Specifies the horizontal alignment of the content inside the row.
- **Example**: <tr align="center"> (centers the content of the row).

- **valign**: Specifies the vertical alignment of the content inside the row.

   Example: <tr valign="top"> (aligns the content to the top of the row).

(TABLE HEADER CELL) ELEMENT ATTRIBUTES:

- **colspan**: Defines the number of columns a header cell should span.

  Example: <th colspan="2">Header Cell</th> (spans across two columns).

- **rowspan**: Defines the number of rows a header cell should span.

  Example: <th rowspan="2">Header Cell</th> (spans across two rows).

- **align**: Specifies the alignment of the content inside the header cell.

  Example: <th align="center">Header</th> (centers the header text).

(TABLE DATA CELL) ELEMENT ATTRIBUTES:

- colspan: Defines the number of columns a cell should span.

  Example: <td colspan="3">Data Cell</td> (spans across three columns).

- rowspan: Defines the number of rows a cell should span.

  Example: <td rowspan="2">Data Cell</td> (spans across two rows).

- align: Specifies the horizontal alignment of the content inside the data cell.

  Example: <td align="right">Data</td> (aligns the content to the right).

- valign: Specifies the vertical alignment of the content inside the data cell.

  Example: <td valign="bottom">Data</td> (aligns the content to the bottom of the cell).
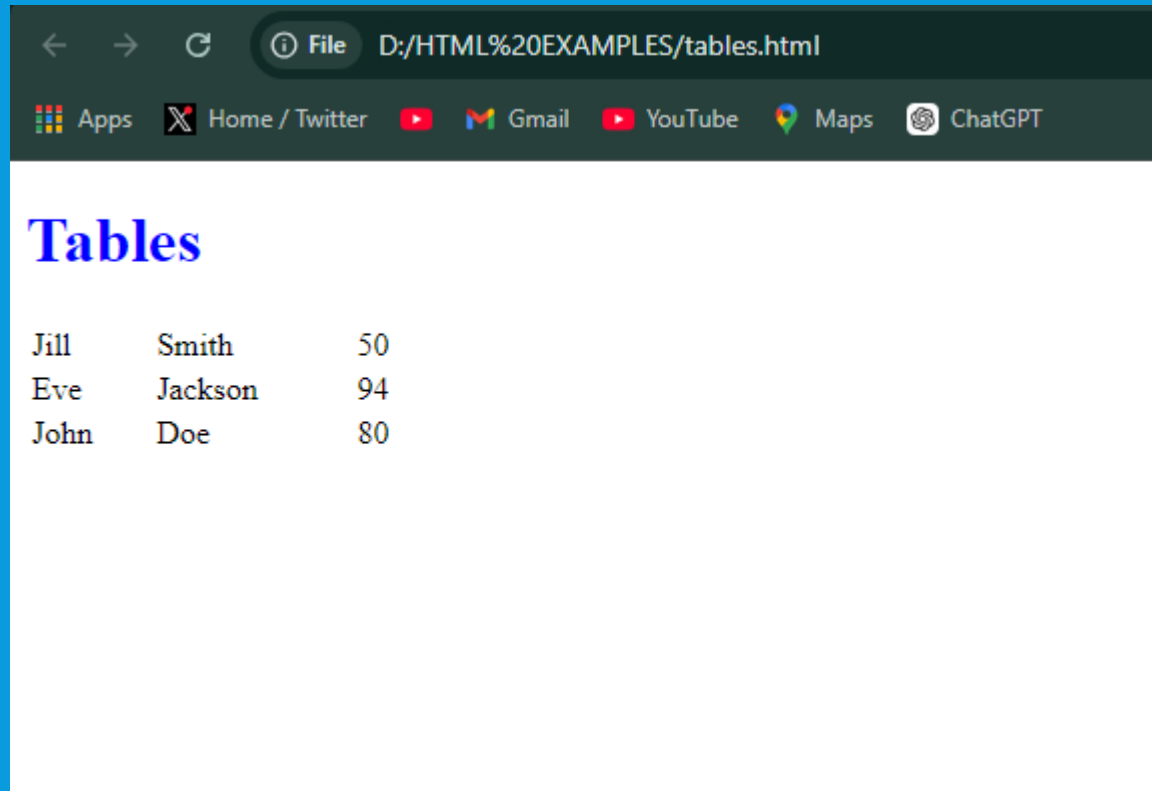
EXAMPLE

```
1   <!DOCTYPE html>
2   <html lang="en">
3   <head>
4     <meta charset="UTF-8">
5     <meta name="viewport" content="width=device-width, initial-scale=1.0">
6     <title>Tables Example</title>
7   </head>
8   <body>
9     <h1 style="color: blue; ">Tables</h1>
10
11    <table style="width:200px">
12      <tr>
13        <td>Jill</td>
14        <td>Smith</td>
15        <td>50</td>
16      </tr>
17      <tr>
18        <td>Eve</td>
19        <td>Jackson</td>
20        <td>94</td>
21      </tr>
22      <tr>
23        <td>John</td>
24        <td>Doe</td>
25        <td>80</td>
26      </tr>
27    </table>
28
29  </body>
30  </html>
```
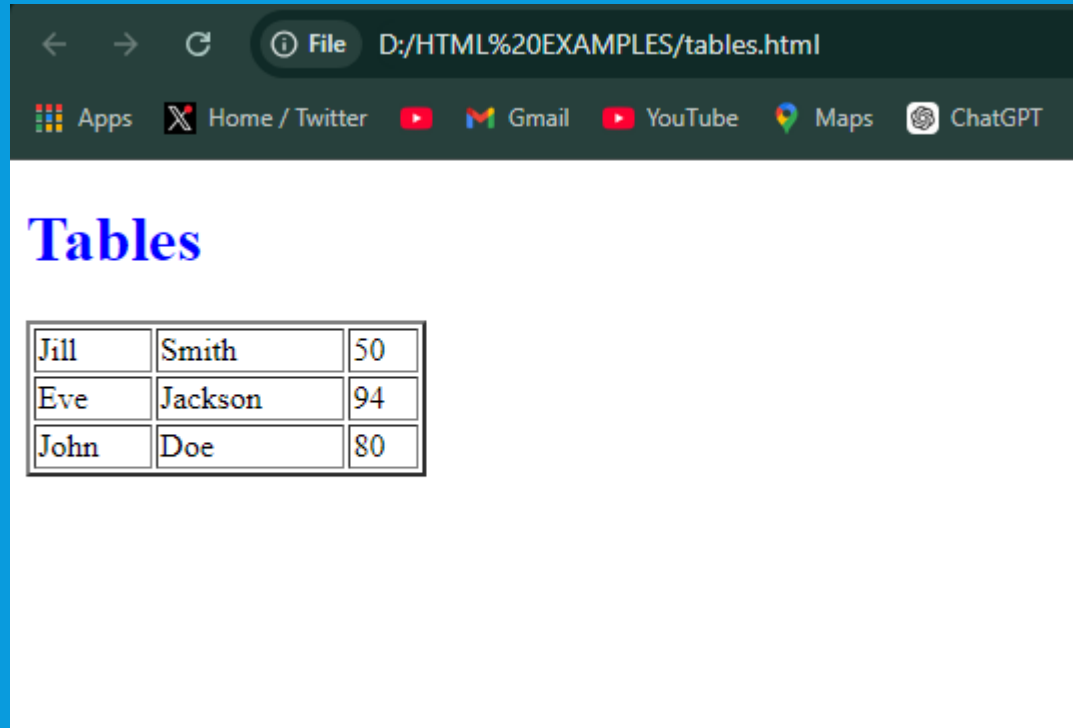
OUTPUT

- The output wont show with a table like because border wasn't include

EXAMPLE WITH BORDER INCLUDED

```html
1   <!DOCTYPE html>
2   <html lang="en">
3   <head>
4     <meta charset="UTF-8">
5     <meta name="viewport" content="width=device-width, initial-scale=1.0">
6     <title>Tables Example</title>
7   </head>
8   <body>
9     <h1 style="color: ■blue; ">Tables</h1>
10
11    <table border="1" style="width:200px">
12      <tr>
13        <td>Jill</td>
14        <td>Smith</td>
15        <td>50</td>
16      </tr>
17      <tr>
18        <td>Eve</td>
19        <td>Jackson</td>
20        <td>94</td>
21      </tr>
22      <tr>
23        <td>John</td>
24        <td>Doe</td>
25        <td>80</td>
26      </tr>
27    </table>
28
29  </body>
30  </html>
31
```

OUTPUT : TO MAKE JUST A TABLE JUST ADD A BORDER INSIDE THE TABLE AS SHOWN ABOVE
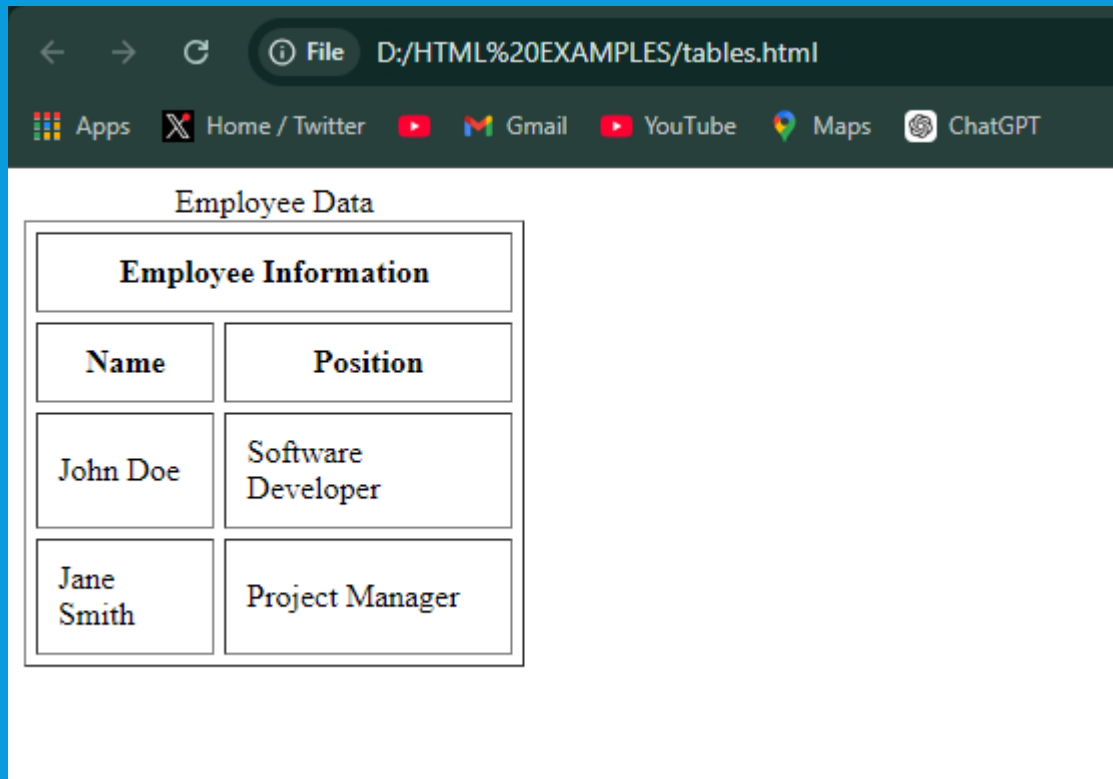
ADDING BORDER USING CSS STYLE, THE OUTPUT WILL BE THE SAME AS THE ABOVE ONE

```
1   <!DOCTYPE html>
2   <head>
3      <title>Tables Example</title>
4      <style>
5         table, th, td {
6            border: 1px solid black;
7         }
8      </style>
9   </head>
10  <body>
11     <h1 style="color: blue; ">Tables</h1>
12
13     <table  style="width:200px">
14        <tr>
15           <td>Jill</td>
16           <td>Smith</td>
17           <td>50</td>
18        </tr>
19        <tr>
20           <td>Eve</td>
21           <td>Jackson</td>
22           <td>94</td>
23        </tr>
24        <tr>
25           <td>John</td>
26           <td>Doe</td>
27           <td>80</td>
28        </tr>
29     </table>
30
31  </body>
32  </html>
```

EXAMPLE 1

```html
1    <!DOCTYPE html>
2    <head>
3        <title>Sample Table</title>
4    </head>
5    <body>
6
7        <table border="1" cellspacing="5" cellpadding="10" style="width: 250px;">
8            <caption>Employee Data</caption>
9            <thead>
10               <tr>
11                   <th colspan="2">Employee Information</th>
12               </tr>
13               <tr>
14                   <th>Name</th>
15                   <th>Position</th>
16               </tr>
17           </thead>
18           <tbody>
19               <tr>
20                   <td>John Doe</td>
21                   <td>Software Developer</td>
22               </tr>
23               <tr>
24                   <td>Jane Smith</td>
25                   <td>Project Manager</td>
26               </tr>
27           </tbody>
28       </table>
29
30   </body>
31   </html>
```

EXAMPLE 1: OUTPUT

EXAMPLE 2: LETS ADD A SALARY COLUMN ON THE EXAMPLE 1

- The screenshot only shows the table don't forget to include the html,head and body

```
<table border="1">
  <tr>
    <th>Name</th>
    <th>Position</th>
    <th>Salary</th>
  </tr>
  <tr>
    <td>John Doe</td>
    <td>Software Developer</td>
    <td>$85,000</td>
  </tr>
  <tr>
    <td>Jane Smith</td>
    <td>Project Manager</td>
    <td>$95,000</td>
  </tr>
  <tr>
    <td>Samuel Brown</td>
    <td>UI/UX Designer</td>
    <td>$70,000</td>
  </tr>
  <tr>
    <td>Emily White</td>
    <td>QA Tester</td>
    <td>$65,000</td>
  </tr>
</table>
```

EXAMPLE 2: OUTPUT

Name	Position	Salary
John Doe	Software Developer	$85,000
Jane Smith	Project Manager	$95,000
Samuel Brown	UI/UX Designer	$70,000
Emily White	QA Tester	$65,000

EXAMPLE 3

```html
<!DOCTYPE html>
<body>

  <h2>Outer Table with Inner Table</h2>

  <table border="3">
    <tr>
      <th>Employee Name</th>
      <th>Details</th>
    </tr>
    <tr>
      <td>John Doe</td>
      <td>
        <!-- Nested Table -->
        <table border="2">
          <tr>
            <th>Position</th>
            <th>Salary</th>
          </tr>
          <tr>
            <td>Software Developer</td>
            <td>$85,000</td>
          </tr>
        </table>
      </td>
    </tr>
  </table>

</body>
</html>
```

EXAMPLE 3 OUTPUT

Outer Table with Inner Table

Employee Name	Details	
John Doe	**Position**	**Salary**
	Software Developer	$85,000

EXAMPLE FROM KNEC PAST PAPER

- Lets write the code from knec IBP November 2022 Q7c

(c) Write a HTML code that will display the following table when run on a web browser.

Subjects			Date
Database	Computer application	Data communication	12/08/2022
Communication Skills			13/08/2022

Set the amount of space between the borders of the outer table cells and its contents to be 10 pixels and all the borders to be red for both tables.   (10 marks)

2920/304
November 2022

4

ANSWER TO Q7C

```html
1   <!DOCTYPE html>
2   <head>
3     <title>Subjects and Dates Table</title>
4   </head>
5   <body>
6
7     <h2>Subjects and Dates Information</h2>
8
9     <table border="2" style="width: 45%;">
10      <tr>
11        <th colspan="2">Subject</th>
12        <th>Date</th>
13      </tr>
14      <tr>
15        <td colspan="2">
16          <table border="1" style="width: 90%; margin: 10px auto;"> <!-- Centered with margins -->
17            <tr>
18              <td>Database</td>
19              <td>Computer Application</td>
20              <td>Data Communication</td>
21            </tr>
22          </table>
23        </td>
24        <td>2025-01-18</td>
25      </tr>
26      <tr>
27        <td colspan="2" align="center">Communication Skills</td>
28        <td>2025-01-25</td>
29      </tr>
30    </table>
31  </body>
32  </html>
```

OUTPUT TO Q7C

EXAMPLE: IBP JULY 2022 Q3D (KNEC)

- Ill just draw the diagram, you can go ahead and add the additional features as per the question

would help him identify the links on the website. (3 marks)

(d) The following is a table generated when a HTML code is run on a web browser.

PLACE A BANNER HERE	
Links1	
Links2	Content goes here
Links3	

Table 1

Write the code that would be used to generate table 1 with the following additional features:

- Cell spacing of 1 pixel, Cell padding of size 0 and boarder of size 3;
- First row to have a height of 50 pixel and a background colour of red;
- Second cell to have a width of 30% and background colour of green;
- The text Links1 to link to a page named Home.html.

(10 marks)

4. (a) Outline **four** advantages of using a *dynamic web page*. (4 marks)

ANSWER: IBP JULY 2022 Q3D (KNEC)

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Banner Table Example</title>
</head>
<body>

  <h2>Table with Banner and Links</h2>

  <table border="2">
    <tr>
      <th colspan="2">Place a Banner Here</th>
    </tr>
    <tr>
      <td>
        <ul style="list-style-type: none; padding: 0;">
          <li><a href="#">Link 1</a></li>
          <li><a href="#">Link 2</a></li>
          <li><a href="#">Link 3</a></li>
        </ul>
      </td>
      <td>Content goes here</td>
    </tr>
  </table>

</body>
</html>
```
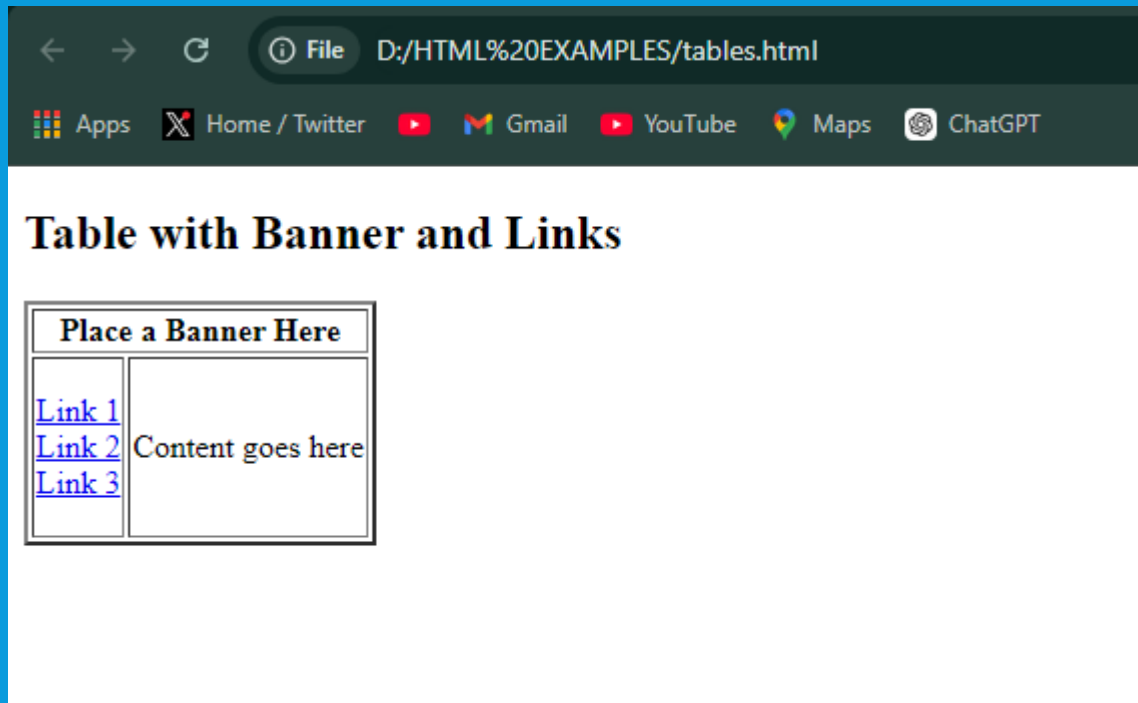
OUTPUT: IBP JULY 2022 Q3D (KNEC)

EXAMPLE: IBP NOVEMBER 2021 Q5D (KNEC)

- Ill just draw the diagram you can do the rest

(d) Write a HTML code that would display Table 1 with the following additional specifications:

- background colour code: lime
  - Cell6 height: 100 pixels   (7 marks)

Cell1	Cell2	
Cell4	Cell5	Cell3
Cell6		

Table 1

6. (a) Distinguish between *applets* and *servlets* as used in the Internet.   (4 marks)

   (b) (i) Explain **one** cause of each of the following threats in the Internet:

       (I)   cross-site scripting attack;   (2 marks)

       (II) broken authentication and session management.   (2 marks)
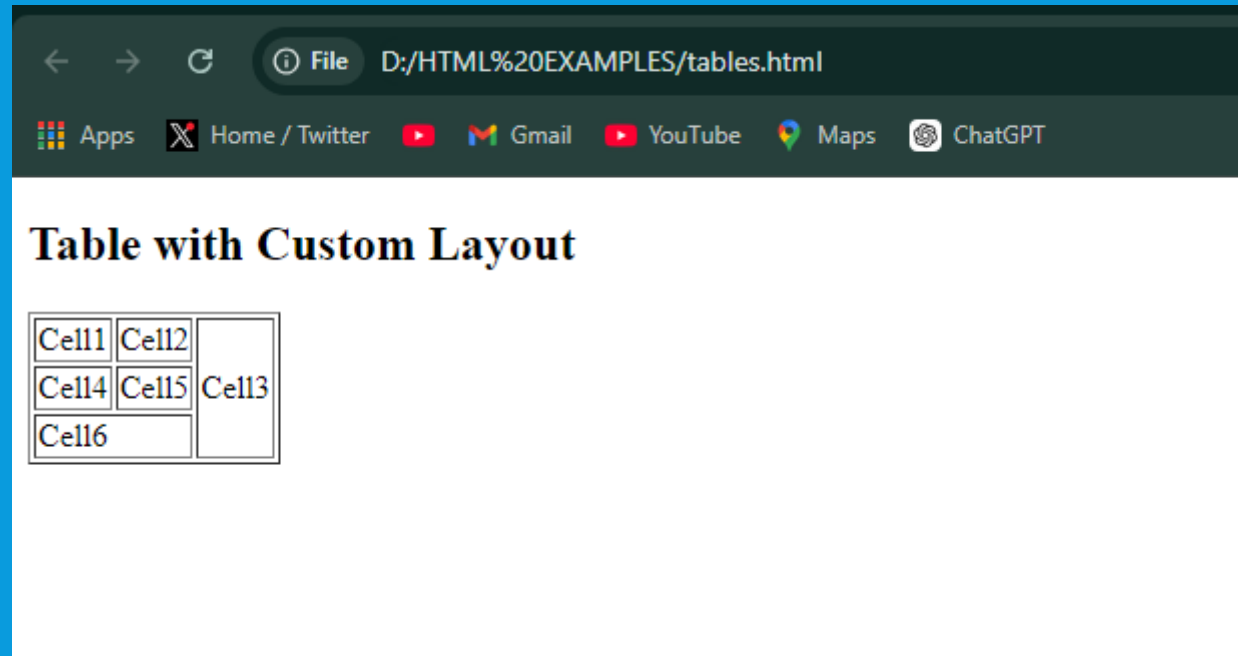
ANSWER: IBP NOVEMBER 2021 Q5D (KNEC)

```html
1   <!DOCTYPE html>
2   <html lang="en">
3   <head>
4       <title>Table Layout Example</title>
5   </head>
6   <body>
7
8       <h2>Table with Custom Layout</h2>
9
10      <table border="1">
11        <tr>
12          <td>Cell1</td>
13          <td>Cell2</td>
14          <td rowspan="3">Cell3</td> <!-- Cell3 takes up 3 rows -->
15        </tr>
16        <tr>
17          <td>Cell4</td>
18          <td>Cell5</td>
19        </tr>
20        <tr>
21          <td colspan="2" >Cell6</td> <!-- Cell6 spans two columns -->
22        </tr>
23      </table>
24
25  </body>
26  </html>
27
```

OUTPUT: IBP NOVEMBER 2021 Q5D (KNEC) YOU CAN GIVE THE SPACINGS BETWEEN THE CONTENT AND THE BORDER
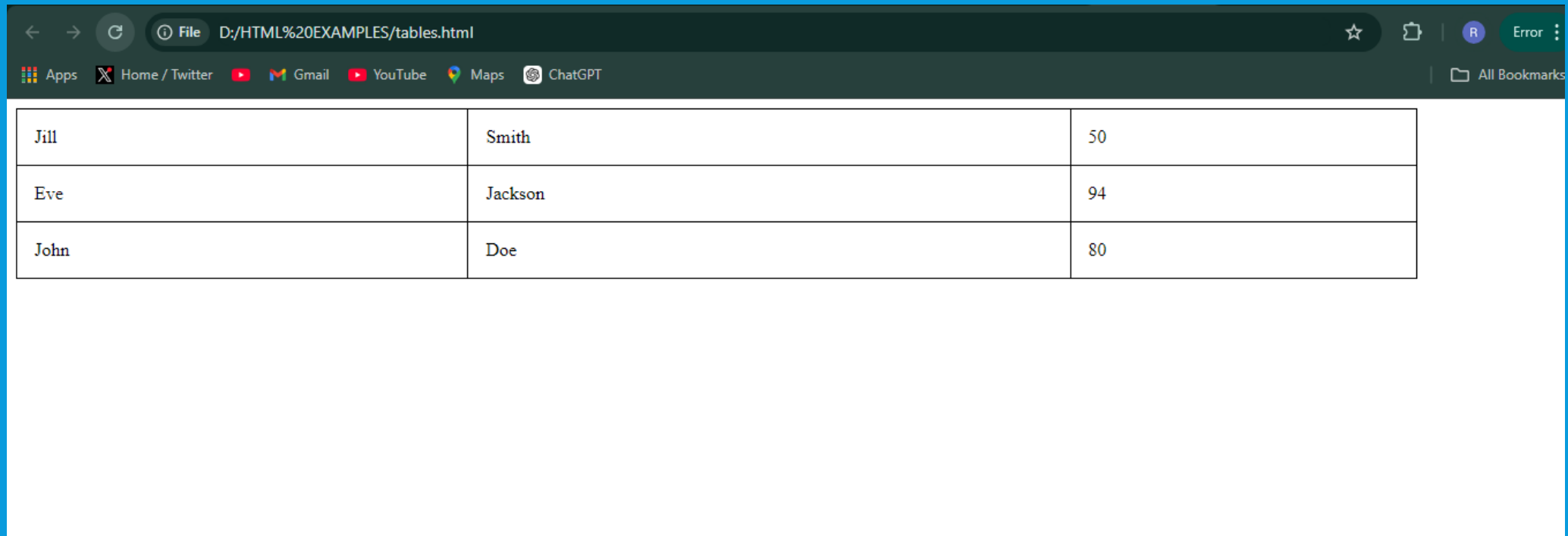
EXAMPLE A: USING CSS

```html
<head>
<style>
table, th, td {
    border: 1px solid ☐black;
    border-collapse: collapse;
}
th, td {
    padding: 15px;
}
</style>
</head>
<body>

<table style="width:90%">
  <tr>
    <td>Jill</td>
    <td>Smith</td>
    <td>50</td>
  </tr>
  <tr>
    <td>Eve</td>
    <td>Jackson</td>
    <td>94</td>
  </tr>
  <tr>
    <td>John</td>
    <td>Doe</td>
    <td>80</td>
  </tr>
</table>
```
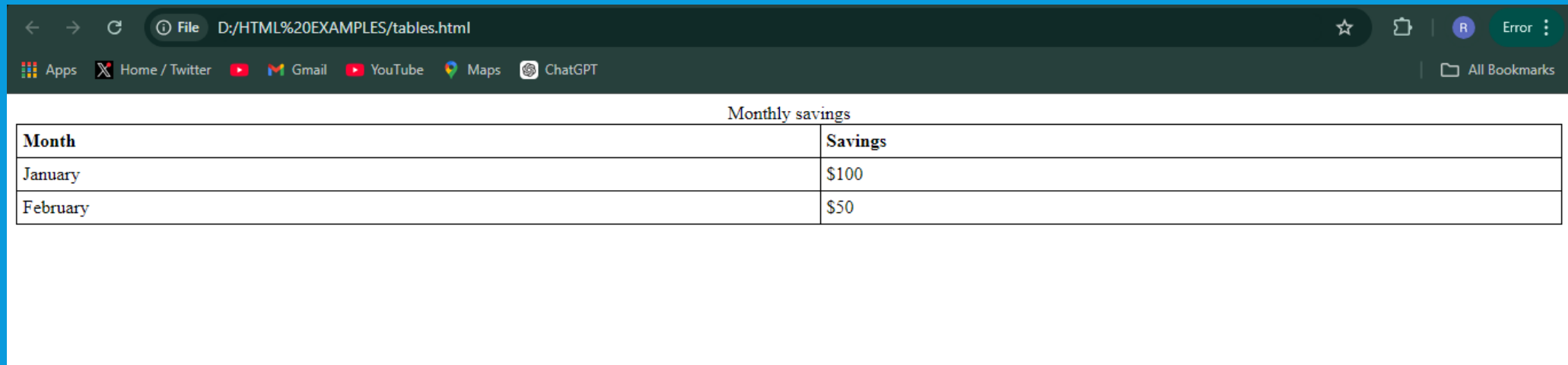
EXAMPLE A: OUTPUT

Jill	Smith	50
Eve	Jackson	94
John	Doe	80

LETS MAKE HEADING TO START ON RIGHT SIDE (TEXT-ALIGHN: RIGHT;)

```
1   <!DOCTYPE html>
2   <html>
3   <head>
4   <style>
5   table, th, td {
6       border: 1px solid □black;
7       border-collapse: collapse;
8   }
9   th, td {
10      padding: 5px;
11  }
12  th {
13      text-align: right;
14  }
15  </style>
16  </head>
17  <body>
18
19  <table style="width:100%">
20    <tr>
21      <th>Firstname</th>
22      <th>Lastname</th>
23      <th>Points</th>
24    </tr>
25    <tr>
26      <td>Jill</td>
27      <td>Smith</td>
28      <td>50</td>
29    </tr>
30    <tr>
31      <td>Eve</td>
32      <td>Jackson</td>
```

```
32      <td>Jackson</td>
33      <td>94</td>
34    </tr>
35    <tr>
36      <td>John</td>
37      <td>Doe</td>
38      <td>80</td>
39    </tr>
40  </table>
41
42  </body>
43  </html>
44
```

OUTPUT: THE HEADINGS, FIRSTNAME , LASTNAME AND POINTS ARE ALIGNED TO THE RIGHT

Firstname	Lastname	Points
Jill	Smith	50
Eve	Jackson	94
John	Doe	80

EXAMPLE B: WITH CAPTION AT LINE 18

```
 4  ∨ <style>
 5  ∨ table, th, td {
 6          border: 1px solid □black;
 7          border-collapse: collapse;
 8      }
 9      th, td {
10          padding: 5px;
11          text-align: left;
12      }
13      </style>
14      </head>
15      <body>
16
17      <table style="width:100%">
18        <caption>Monthly savings</caption>    |
19        <tr>
20          <th>Month</th>
21          <th>Savings</th>
22        </tr>
23        <tr>
24          <td>January</td>
25          <td>$100</td>
26        </tr>
27        <tr>
28          <td>February</td>
29          <td>$50</td>
30        </tr>
31      </table>
32
```

OUTPUT; THE CAPTION MONTHLY SAVINGS

DO MORE QUESTION FROM THE PAST PAPERS

And try using different css like external css and style css

And more examples using classes to style

If you have a challenge with drawings from knec pastpapers just contact us we can assist you with the drawing for free