

<table>

1) WHAT IS <table> TAG?

THE <table> TAG IN HTML IS USED TO CREATE A TABLE. A TABLE IN HTML CONSISTS OF ROWS AND COLUMNS, WHERE DATA CAN BE ORGANIZED AND DISPLAYED IN A TABULAR FORMAT.

2) WHY WE NEED THIS TAG: PURPOSE AND ADVANTAGES

PURPOSE:

- TO DISPLAY DATA IN A STRUCTURED AND ORGANIZED MANNER.
- TO REPRESENT TABULAR DATA IN WEB PAGES, SUCH AS SPREADSHEETS, REPORTS, FINANCIAL DATA, ETC.

ADVANTAGES:

- ORGANIZATION: ALLOWS FOR CLEAR ORGANIZATION OF DATA INTO ROWS AND COLUMNS.
- READABILITY: MAKES DATA MORE READABLE AND EASIER TO UNDERSTAND.
- STYLE AND DESIGN: CAN BE STYLED USING CSS TO MAKE DATA PRESENTATION MORE VISUALLY APPEALING.
- ACCESSIBILITY: CAN BE USED WITH SCREEN READERS TO MAKE DATA ACCESSIBLE TO USERS WITH DISABILITIES.

3) HOW TO USE <table> TAGS

BASIC STRUCTURE:

html

Copy code

```
<TABLE>

<TR>

  <TH>HEADER 1</TH>

  <TH>HEADER 2</TH>

</TR>

<TR>

  <TD>DATA 1</TD>

  <TD>DATA 2</TD>

</TR>

<TR>

  <TD>DATA 3</TD>
```

```
<TD>DATA 4</TD>
</TR>
</TABLE>
```

TAGS:

<table>: DEFINES THE TABLE.

<tr>: DEFINES A TABLE ROW.

<th>: DEFINES A TABLE HEADER CELL (BOLD AND CENTERED BY DEFAULT).

<td>: DEFINES A TABLE DATA CELL.

4) REAL-TIME EXAMPLES

EXAMPLE 1: SIMPLE TABLE

```
<!DOCTYPE html>
<HTML LANG="EN">
<HEAD>
  <META CHARSET="UTF-8">
  <TITLE>SIMPLE TABLE EXAMPLE</TITLE>
  <STYLE>
    TABLE {
      WIDTH: 50%;
      BORDER-COLLAPSE: COLLAPSE;
    }
    TH, TD {
      BORDER: 1PX SOLID BLACK;
      PADDING: 8PX;
      TEXT-ALIGN: LEFT;
    }
    TH {
      BACKGROUND-COLOR: #F2F2F2;
    }
  </STYLE>
</HEAD>
<BODY>
  <H2>STUDENT SCORES</H2>
```

```
<TABLE>

  <TR>

    <TH>NAME</TH>

    <TH>SUBJECT</TH>

    <TH>SCORE</TH>

  </TR>

  <TR>

    <TD>JOHN DOE</TD>

    <TD>MATH</TD>

    <TD>90</TD>

  </TR>

  <TR>

    <TD>JANE SMITH</TD>

    <TD>ENGLISH</TD>

    <TD>85</TD>

  </TR>

  <TR>

    <TD>BOB JOHNSON</TD>

    <TD>SCIENCE</TD>

    <TD>95</TD>

  </TR>

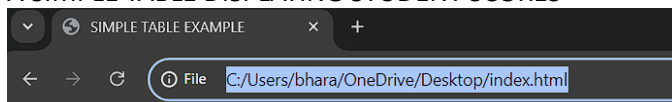
</TABLE>

</BODY>

</HTML>
```

OUTPUT:

A SIMPLE TABLE DISPLAYING STUDENT SCORES



STUDENT SCORES

NAME	SUBJECT	SCORE
JOHN DOE	MATH	90
JANE SMITH	ENGLISH	85
BOB JOHNSON	SCIENCE	95

<td>

1) WHAT IS <td> TAG?

THE <td> TAG IN HTML IS USED TO DEFINE A CELL IN A TABLE ROW. IT STANDS FOR "TABLE DATA" AND IS USED TO REPRESENT THE ACTUAL DATA OR CONTENT INSIDE A TABLE.

2) WHY WE NEED THIS TAG: PURPOSE AND ADVANTAGES

PURPOSE:

- TO DEFINE AND DISPLAY INDIVIDUAL DATA CELLS IN A TABLE.
- TO ORGANIZE CONTENT IN A STRUCTURED AND READABLE FORMAT WITHIN A TABLE.

ADVANTAGES:

- STRUCTURED DATA: ALLOWS FOR THE ORGANIZATION OF DATA INTO ROWS AND COLUMNS, MAKING IT MORE STRUCTURED.
- CLARITY: ENHANCES THE READABILITY OF DATA BY SEPARATING IT INTO DISTINCT CELLS.
- STYLE AND DESIGN: CAN BE STYLED USING CSS TO IMPROVE VISUAL PRESENTATION.
- ACCESSIBILITY: CAN BE USED WITH SCREEN READERS TO MAKE DATA ACCESSIBLE TO USERS WITH DISABILITIES.

3) HOW TO USE <td> TAGS

BASIC USAGE:

THE <td> TAG IS USED WITHIN A <tr> (TABLE ROW) TAG AND IS NESTED INSIDE A <table> TAG. HERE'S THE BASIC SYNTAX:

```
<TABLE>
```

```
<TR>
```

```
<TD>DATA 1</TD>
```

```
<TD>DATA 2</TD>
```

```
</TR>
```

```
<TR>
```

```
<TD>DATA 3</TD>
```

```
<TD>DATA 4</TD>
```

</TR>

</TABLE>

4) REAL-TIME EXAMPLES

EXAMPLE : SIMPLE TABLE WITH DATA CELLS

<!DOCTYPE html>

<HTML LANG="EN">

<HEAD>

<META CHARSET="UTF-8">

<TITLE>TABLE EXAMPLE WITH <TD> TAG</TITLE>

<STYLE>

TABLE {

WIDTH: 50%;

BORDER-COLLAPSE: COLLAPSE;

}

TH, TD {

BORDER: 1PX SOLID BLACK;

PADDING: 8PX;

TEXT-ALIGN: LEFT;

}

TH {

BACKGROUND-COLOR: #F2F2F2;

}

</STYLE>

</HEAD>

<BODY>

<H2>EMPLOYEE DETAILS</H2>

<TABLE>

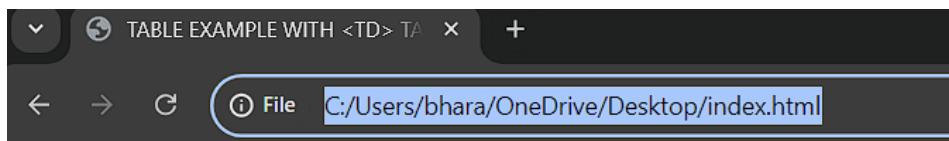
<TR>

<TH>NAME</TH>

<TH>DEPARTMENT</TH>

```
        <TH>SALARY</TH>
    </TR>
    <TR>
        <TD>ALICE</TD>
        <TD>HR</TD>
        <TD>$50,000</TD>
    </TR>
    <TR>
        <TD>BOB</TD>
        <TD>ENGINEERING</TD>
        <TD>$70,000</TD>
    </TR>
    <TR>
        <TD>CHARLIE</TD>
        <TD>MARKETING</TD>
        <TD>$60,000</TD>
    </TR>
</TABLE>
</BODY>
</HTML>
```

OUTPUT:-



EMPLOYEE DETAILS

NAME	DEPARTMENT	SALARY
ALICE	HR	\$50,000
BOB	ENGINEERING	\$70,000
CHARLIE	MARKETING	\$60,000

<th>

1) WHAT IS <th> TAG?

THE <th> TAG IN HTML IS USED TO DEFINE A HEADER CELL IN A TABLE. IT STANDS FOR "TABLE HEADER" AND IS USED TO DESIGNATE CELLS THAT CONTAIN HEADER INFORMATION FOR COLUMNS OR ROWS.

2) WHY WE NEED THIS TAG: PURPOSE AND ADVANTAGES

PURPOSE:

- TO DEFINE HEADER CELLS IN A TABLE THAT PROVIDE CONTEXT AND DESCRIPTION FOR THE DATA IN THE COLUMNS OR ROWS.
- TO IMPROVE THE STRUCTURE AND ORGANIZATION OF TABULAR DATA.

ADVANTAGES:

- READABILITY: HEADER CELLS MAKE TABLES EASIER TO READ AND UNDERSTAND BY PROVIDING CONTEXT FOR THE DATA.
- STYLING: BY DEFAULT, HEADER CELLS ARE BOLD AND CENTERED, MAKING THEM DISTINCT FROM REGULAR DATA CELLS.
- ACCESSIBILITY: SCREEN READERS USE HEADER CELLS TO PROVIDE USERS WITH A BETTER UNDERSTANDING OF THE TABLE'S STRUCTURE.
- SEMANTICS: HEADER CELLS CONVEY THE PURPOSE OF THE CELL CONTENTS TO BOTH BROWSERS AND SEARCH ENGINES.

3) HOW TO USE <th> TAGS

BASIC USAGE:

THE <th> TAG IS USED WITHIN A <tr> (TABLE ROW) TAG AND IS NESTED INSIDE A <table> TAG. HERE'S THE BASIC SYNTAX:

```
<TABLE>
```

```
<TR>
```

```
<TH>HEADER 1</TH>
```

```
<TH>HEADER 2</TH>
```

```
</TR>
```

```
<TR>
```

```
<TD>DATA 1</TD>
```

```
<TD>DATA 2</TD>
```

```
</TR>
```

```
</TABLE>
```

4) REAL-TIME EXAMPLES

EXAMPLE 1: SIMPLE TABLE WITH HEADER CELLS

```
<!DOCTYPE html>

<HTML LANG="EN">

<HEAD>

  <META CHARSET="UTF-8">

  <TITLE>SIMPLE TABLE WITH <TH> TAG</TITLE>

  <STYLE>

    TABLE {

      WIDTH: 50%;

      BORDER-COLLAPSE: COLLAPSE;

    }

    TH, TD {

      BORDER: 1PX SOLID BLACK;

      PADDING: 8PX;

      TEXT-ALIGN: LEFT;

    }

    TH {

      BACKGROUND-COLOR: #F2F2F2;

    }

  </STYLE>

</HEAD>

<BODY>

  <H2>PRODUCT INVENTORY</H2>

  <TABLE>

    <TR>

      <TH>PRODUCT NAME</TH>

      <TH>QUANTITY</TH>

      <TH>PRICE</TH>

    </TR>

    <TR>
```



```
<TD>LAPTOP</TD>

<TD>10</TD>

<TD>$800</TD>

</TR>

<TR>

  <TD>SMARTPHONE</TD>

  <TD>20</TD>

  <TD>$500</TD>

</TR>

<TR>

  <TD>TABLET</TD>

  <TD>15</TD>

  <TD>$300</TD>

</TR>

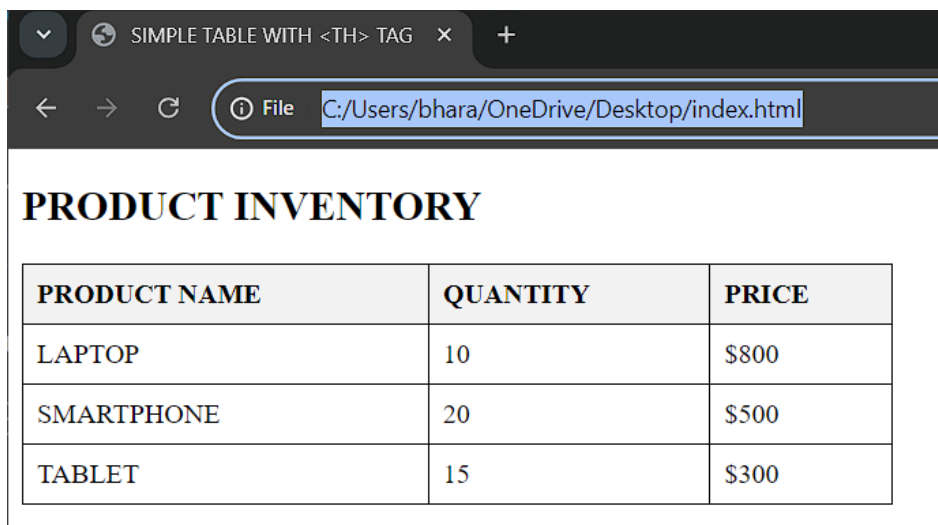
</TABLE>

</BODY>

</HTML>
```

OUTPUT:

EXAMPLE DISPLAYS A SIMPLE TABLE WITH COLUMN HEADERS DEFINING THE PRODUCT INVENTORY.



The screenshot shows a web browser window with a single tab titled "SIMPLE TABLE WITH <TH> TAG". The address bar shows the file path "C:/Users/bhara/OneDrive/Desktop/index.html". The main content area displays a table with the title "PRODUCT INVENTORY". The table has three columns: "PRODUCT NAME", "QUANTITY", and "PRICE". The rows contain data for "LAPTOP", "SMARTPHONE", and "TABLET".

PRODUCT NAME	QUANTITY	PRICE
LAPTOP	10	\$800
SMARTPHONE	20	\$500
TABLET	15	\$300

<tr>

1) WHAT IS <tr> TAG?

THE <tr> TAG IN HTML IS USED TO DEFINE A ROW IN A TABLE. IT STANDS FOR "TABLE ROW" AND IS USED TO GROUP ONE OR MORE <th> (TABLE HEADER) OR <td> (TABLE DATA) ELEMENTS THAT REPRESENT THE CELLS IN THE ROW.

2) WHY WE NEED THIS TAG: PURPOSE AND ADVANTAGES

PURPOSE:

- TO DEFINE A ROW IN A TABLE.
- TO GROUP CELLS INTO A STRUCTURED AND ORGANIZED ROW FORMAT.

ADVANTAGES:

- STRUCTURED DATA: ALLOWS FOR THE ORGANIZATION OF TABLE CELLS INTO ROWS, MAKING DATA MORE STRUCTURED.
- READABILITY: ENHANCES THE READABILITY OF TABLE DATA BY ORGANIZING IT INTO LOGICAL ROWS.
- CONSISTENCY: ENSURES CONSISTENT LAYOUT OF DATA BY DEFINING ROWS FOR BOTH HEADERS AND DATA CELLS.
- STYLING: CAN BE STYLED USING CSS TO IMPROVE VISUAL PRESENTATION AND DISTINGUISH DIFFERENT ROWS.

3) HOW TO USE <tr> TAGS

BASIC USAGE:

THE <tr> TAG IS USED INSIDE A <table> TAG AND CAN CONTAIN ONE OR MORE <th> OR <td> ELEMENTS. HERE'S THE BASIC SYNTAX:

```
<TABLE>
```

```
<TR>
```

```
<TH>HEADER 1</TH>
```

```
<TH>HEADER 2</TH>
```

```
</TR>
```

```
<TR>
```

```
<TD>DATA 1</TD>
```

```
<TD>DATA 2</TD>
```

```
</TR>
```

```
</TABLE>
```

4) REAL-TIME EXAMPLES

EXAMPLE : SIMPLE TABLE WITH ROWS

```
<!DOCTYPE html>

<HTML LANG="EN">

<HEAD>

  <META CHARSET="UTF-8">

  <TITLE>SIMPLE TABLE WITH <TR> TAG</TITLE>

  <STYLE>

    TABLE {

      WIDTH: 50%;

      BORDER-COLLAPSE: COLLAPSE;

    }

    TH, TD {

      BORDER: 1PX SOLID BLACK;

      PADDING: 8PX;

      TEXT-ALIGN: LEFT;

    }

    TH {

      BACKGROUND-COLOR: #F2F2F2;

    }

  </STYLE>

</HEAD>

<BODY>

  <H2>STUDENT GRADES</H2>

  <TABLE>

    <TR>

      <TH>NAME</TH>

      <TH>SUBJECT</TH>

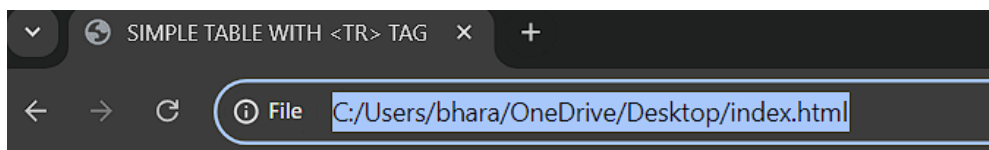
      <TH>GRADE</TH>

    </TR>
```

```
<TR>
  <TD>JANE DOE</TD>
  <TD>MATH</TD>
  <TD>A</TD>
</TR>
<TR>
  <TD>JOHN SMITH</TD>
  <TD>ENGLISH</TD>
  <TD>B</TD>
</TR>
<TR>
  <TD>EMILY JOHNSON</TD>
  <TD>SCIENCE</TD>
  <TD>A+</TD>
</TR>
</TABLE>
</BODY>
</HTML>
```

OUTPUT:

EXAMPLE DISPLAYS STUDENT GRADES IN A SIMPLE TABLE FORMAT WITH ROWS DEFINING THE DATA FOR EACH STUDENT.



STUDENT GRADES

NAME	SUBJECT	GRADE
JANE DOE	MATH	A
JOHN SMITH	ENGLISH	B
EMILY JOHNSON	SCIENCE	A+

<tbody>

1) WHAT IS <tbody> TAG?

THE <tbody> TAG IN HTML IS USED TO GROUP THE BODY CONTENT IN A TABLE. IT CONTAINS ONE OR MORE <tr> TAGS THAT DEFINE THE ROWS OF THE TABLE BODY. THE <tbody> ELEMENT IS USED TO SEPARATE THE BODY CONTENT OF THE TABLE FROM THE HEADER (<thead>) AND FOOTER (<tfoot>).

2) WHY WE NEED THIS TAG: PURPOSE AND ADVANTAGES

PURPOSE:

- TO GROUP AND ORGANIZE THE BODY CONTENT OF A TABLE SEPARATELY FROM THE HEADER AND FOOTER.
- TO PROVIDE A CLEAR STRUCTURE AND ORGANIZATION TO THE TABLE, MAKING IT EASIER TO MANAGE AND STYLE.

ADVANTAGES:

- STRUCTURE: SEPARATES THE BODY CONTENT FROM THE HEADER AND FOOTER, IMPROVING THE TABLE'S STRUCTURE AND READABILITY.
- STYLING: ALLOWS FOR SEPARATE STYLING OF THE TABLE BODY, HEADER, AND FOOTER USING CSS.
- ACCESSIBILITY: IMPROVES ACCESSIBILITY BY PROVIDING A CLEAR STRUCTURE THAT SCREEN READERS AND OTHER ASSISTIVE TECHNOLOGIES CAN UNDERSTAND.
- EASE OF MAINTENANCE: MAKES IT EASIER TO MANAGE AND UPDATE TABLE CONTENTS BY ORGANIZING THEM INTO DISTINCT SECTIONS.

3) HOW TO USE <tbody> TAGS

BASIC USAGE:

THE <tbody> TAG IS USED INSIDE A <table> TAG AND CONTAINS ONE OR MORE <tr> TAGS. HERE'S THE BASIC SYNTAX:

```
<TABLE>
```

```
<THEAD>
```

```
<TR>
```

```
<TH>HEADER 1</TH>
```

```
<TH>HEADER 2</TH>
```

```
</TR>
```

```
</THEAD>
```

```
<TBODY>
```

```

<TR>
  <TD>DATA 1</TD>
  <TD>DATA 2</TD>
</TR>
<TR>
  <TD>DATA 3</TD>
  <TD>DATA 4</TD>
</TR>
</TBODY>
<TFOOT>
  <TR>
    <TD>FOOTER 1</TD>
    <TD>FOOTER 2</TD>
  </TR>
</TFOOT>
</TABLE>

```

4) REAL-TIME EXAMPLES

EXAMPLE : SIMPLE TABLE WITH <tbody>

```

<!DOCTYPE html>
<HTML LANG="EN">
<HEAD>
  <META CHARSET="UTF-8">
  <TITLE>SIMPLE TABLE WITH <TBODY> TAG</TITLE>
  <STYLE>
    TABLE {
      WIDTH: 50%;
      BORDER-COLLAPSE: COLLAPSE;
    }
    TH, TD {
      BORDER: 1PX SOLID BLACK;

```

```
PADDING: 8PX;

TEXT-ALIGN: LEFT;

}

TH {

    BACKGROUND-COLOR: #F2F2F2;

}

</STYLE>

</HEAD>

<BODY>

<H2>CLASS SCHEDULE</H2>

<TABLE>

<THEAD>

<TR>

<TH>DAY</TH>

<TH>SUBJECT</TH>

<TH>TIME</TH>

</TR>

</THEAD>

<TBODY>

<TR>

<TD>MONDAY</TD>

<TD>MATH</TD>

<TD>9:00 AM - 10:00 AM</TD>

</TR>

<TR>

<TD>TUESDAY</TD>

<TD>SCIENCE</TD>

<TD>10:00 AM - 11:00 AM</TD>

</TR>

<TR>
```

```

        <TD>WEDNESDAY</TD>

        <TD>HISTORY</TD>

        <TD>11:00 AM - 12:00 PM</TD>

    </TR>

</TBODY>

<TFOOT>

    <TR>

        <TD COLSPAN="3">NOTE: SCHEDULE IS SUBJECT TO CHANGE.</TD>

    </TR>

</TFOOT>

</TABLE>

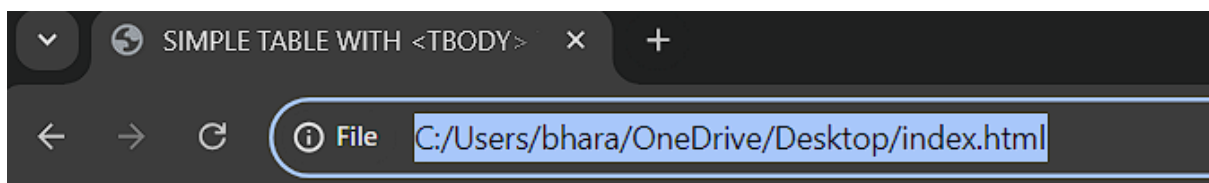
</BODY>

</HTML>

```

OUTPUT:-

EXAMPLE DISPLAYS A CLASS SCHEDULE, ORGANIZING THE TABLE INTO A HEADER, BODY, AND FOOTER SECTION. THE BODY CONTAINS THE MAIN SCHEDULE DATA.



CLASS SCHEDULE

DAY	SUBJECT	TIME
MONDAY	MATH	9:00 AM - 10:00 AM
TUESDAY	SCIENCE	10:00 AM - 11:00 AM
WEDNESDAY	HISTORY	11:00 AM - 12:00 PM
NOTE: SCHEDULE IS SUBJECT TO CHANGE.		

<thead>

1) WHAT IS <thead> TAG?

THE <thead> TAG IN HTML IS USED TO GROUP THE HEADER CONTENT IN A TABLE. IT CONTAINS ONE OR MORE <tr> TAGS THAT DEFINE THE HEADER ROWS OF THE TABLE. THIS TAG IS USED TO SEPARATE THE HEADER FROM THE BODY (<tbody>) AND FOOTER (<tfoot>) OF THE TABLE.

2) WHY WE NEED THIS TAG: PURPOSE AND ADVANTAGES

PURPOSE:

- TO DEFINE AND GROUP THE HEADER ROWS OF A TABLE.
- TO PROVIDE A CLEAR STRUCTURE THAT SEPARATES THE HEADER FROM THE BODY AND FOOTER.

ADVANTAGES:

- STRUCTURE: SEPARATES THE HEADER CONTENT FROM THE BODY AND FOOTER, IMPROVING THE TABLE'S STRUCTURE AND READABILITY.
- STYLING: ALLOWS FOR SEPARATE STYLING OF THE HEADER USING CSS, MAKING IT EASIER TO DISTINGUISH HEADER ROWS FROM THE REST OF THE TABLE.
- ACCESSIBILITY: IMPROVES ACCESSIBILITY BY PROVIDING A CLEAR STRUCTURE THAT SCREEN READERS AND OTHER ASSISTIVE TECHNOLOGIES CAN UNDERSTAND.
- CONSISTENCY: ENSURES THAT HEADER INFORMATION IS CONSISTENTLY PLACED AT THE TOP OF THE TABLE.

3) HOW TO USE <thead> TAGS

BASIC USAGE:

THE <thead> TAG IS USED INSIDE A <table> TAG AND CONTAINS ONE OR MORE <tr> TAGS. HERE'S THE BASIC SYNTAX:

```
<TABLE>
```

```
<THEAD>
```

```
<TR>
```

```
<TH>HEADER 1</TH>
```

```
<TH>HEADER 2</TH>
```

```
</TR>
```

```
</THEAD>
```

```
<TBODY>
```

```
<TR>
  <TD>DATA 1</TD>
  <TD>DATA 2</TD>
</TR>
</TBODY>
<TFOOT>
  <TR>
    <TD>FOOTER 1</TD>
    <TD>FOOTER 2</TD>
  </TR>
</TFOOT>
</TABLE>
```

4) REAL-TIME EXAMPLES

EXAMPLE : SIMPLE TABLE WITH <thead>

```
<!DOCTYPE html>
<HTML LANG="EN">
<HEAD>
  <META CHARSET="UTF-8">
  <TITLE>SIMPLE TABLE WITH <THEAD> TAG</TITLE>
  <STYLE>
    TABLE {
      WIDTH: 50%;
      BORDER-COLLAPSE: COLLAPSE;
    }
    TH, TD {
      BORDER: 1PX SOLID BLACK;
      PADDING: 8PX;
      TEXT-ALIGN: LEFT;
    }
```

```
    TH {
        BACKGROUND-COLOR: #F2F2F2;
    }
</STYLE>
</HEAD>
<BODY>
    <H2>PRODUCT LIST</H2>
    <TABLE>
        <THEAD>
            <TR>
                <TH>PRODUCT NAME</TH>
                <TH>PRICE</TH>
                <TH>QUANTITY</TH>
            </TR>
        </THEAD>
        <TBODY>
            <TR>
                <TD>LAPTOP</TD>
                <TD>$900</TD>
                <TD>5</TD>
            </TR>
            <TR>
                <TD>SMARTPHONE</TD>
                <TD>$600</TD>
                <TD>10</TD>
            </TR>
            <TR>
                <TD>TABLET</TD>
                <TD>$300</TD>
                <TD>15</TD>
```

```
</TR>

</TBODY>

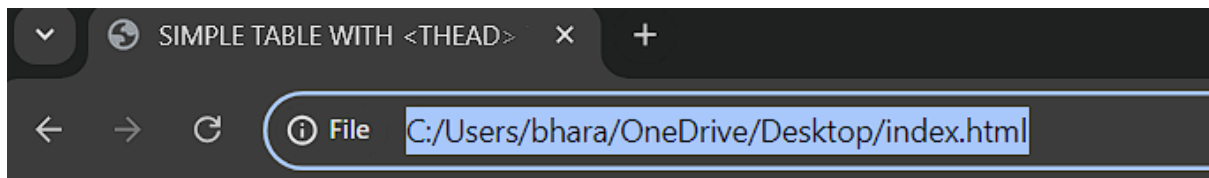
</TABLE>

</BODY>

</HTML>
```

OUTPUT:-

EXAMPLE DISPLAYS A PRODUCT LIST, ORGANIZING THE TABLE INTO A HEADER AND BODY SECTION. THE HEADER CONTAINS THE COLUMN HEADERS.



PRODUCT LIST

PRODUCT NAME	PRICE	QUANTITY
LAPTOP	\$900	5
SMARTPHONE	\$600	10
TABLET	\$300	15