LAB EXPERIMENT: 1

Aim: Build web page for your college with course details, department, faculties, the library using HTML href and list tags.

Code:

```
<!DOCTYPE html>
        <html lang="en">
        <head>
            <meta charset="UTF-8">
            <meta name="viewport" content="width=<device-width>, initial-
scale=1.0">
            <title>Lab 1</title>
            <style>
                body{
                    margin: 0;
                    font-family: system-ui, -apple-system, BlinkMacSystemFont,
'Segoe UI', Roboto, Oxygen, Ubuntu, Cantarell, 'Open Sans', 'Helvetica Neue',
sans-serif;
                    background-image: url('photos/logo1.png');
                    background-repeat: no-repeat;
                    background-size: 700px 350px;
                    background-attachment: fixed;
                    background-position: center;
                }
                header{
                    width: 100%;
                    text-align: center;
                    background-color: #04364A;
```

```
padding-top: 2px;
    display: flex;
    justify-content: space-between;
    align-items: center;
    color: #fbecda;
}
span{
    display: flex;
    align-items: center;
}
.name{
    display: flex;
    margin-left: 20px;
}
.rollno{
    margin-right: 20px;
}
header div a{
    text-decoration: none;
    color: #fbecda;
}
header div a:hover{
    color: #BCA37F;
   font-weight: bold;
}
nav {
    width: 100%;
    display: flex;
    background: #427D9D;
```

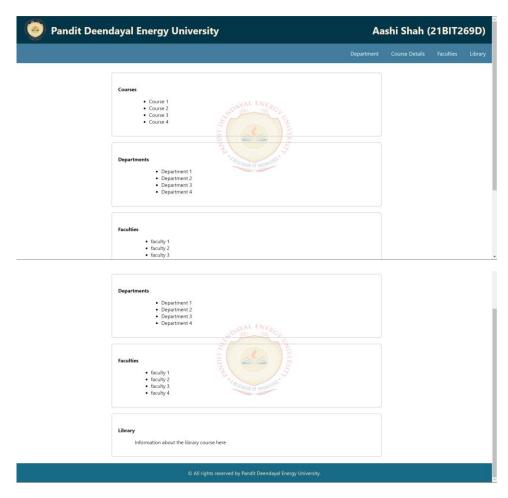
```
margin: 0;
    justify-content: right;
}
nav a {
    color: #DDF2FD;
    text-decoration: none;
    font-size: 17px;
    padding: 20px;
}
nav a:hover{
    font-weight: bold;
    background-color: #DDF2FD;
    color: #164863;
}
.section1{
    margin-left: 20%;
    margin-right: 20%;
    display: flex;
}
.rightdiv{
    flex: 30px;
}
.box{
    width: 90%;
    padding: 20px;
    border: 1px solid darkgray;
    border-radius: 6px;
    margin-bottom: 20px;
    display: flex;
```

```
}
                footer{
                    text-align: center;
                    padding: 20px;
                    background-color: #176B87;
                    color: wheat;
                }
                li a{
                    text-decoration: none;
                    color: black;
                }
                </style>
        </head>
        <body>
            <header>
                <div class = "name">
                    <img src="photos/logo.png" style="width: 70px; height: 70px;</pre>
padding: 5px;margin-right: 10px;">
                    <h1>Pandit Deendayal Energy University</h1>
                </div>
                <div class = "rollno">
                    <a href="Aashi Shah(21BIT269D) H2"><h1>Aashi Shah
(21BIT269D)</h1></a>
                </div>
            </header>
            <nav>
                <span>
                    <a href="#">Department</a>
                    <a href="#">Course Details</a>
                    <a href="#">Faculties</a>
```

```
<a href="#">Library</a>
   </span>
</nav>
<div class="section1" >
   <div class="rightdiv">
          <div class="box" style="margin-top: 30px;">
          <h4>Courses</h4>
          <l
              <br><br><br>>
              <a href="#">Course 1</a>
              <a href="#">Course 2</a>
              <a href="#">Course 3</a>
              <a href="#">Course 4</a>
          </div>
       <div class="box">
          <h4>Departments</h4>
          <l
              <br><br><br>>
              <a href="#">Department 1</a>
              <a href="#">Department 2</a>
              <a href="#">Department 3</a>
              <a href="#">Department 4</a>
          </div>
       <div class="box">
          <h4>Faculties</h4>
```

```
<l
                 <br><br><br>>
                 <a href="#">faculty 1</a>
                 <a href="#">faculty 2</a>
                 <a href="#">faculty 3</a>
                 <a href="#">faculty 4</a>
             </div>
          <div class="box">
             <h4>Library</h4>
             <br>>Information about the library course here
          </div>
      </div>
   </div>
   <footer>
      © All rights reserved by Pandit Deendayal Energy University.
   </footer>
</body>
</html>
```

Output:



Question Answers:

1. what is version and syntax of HTML?

Version: HTML5

Syntax:

<!DOCTYPE html>

<html>

```
<head>
<title>My Web Page</title>
</head>
<body>
<h1>Hello, World!</h1>
This is a paragraph.
</body>
</html>
```

2. What are the latest versions of html,css,js?

HTML: HTML5

CSS: CSS3 (though CSS itself doesn't have a version number like HTML or JavaScript)

JavaScript: ECMAScript 2021 (also known as ES12)

3. What is UTF-8?

UTF-8, also known as Unicode Transformation Format with 8-bit encoding, is a widely used character encoding system that employs variable-length representation to encode each character from the expansive Unicode character set. This versatile and inclusive standard enables support for an extensive range of characters originating from diverse writing systems found across the globe.

The fundamental principle behind UTF-8 involves representing individual characters using varying byte sizes, which can range anywhere between one to four bytes. By adopting this approach, UTF-8 offers a flexible means of accommodating characters derived from different languages and scripts within its comprehensive framework.

4. What is the difference between older html and new html versions?

Difference between older HTML and new HTML versions:

- New Semantic Elements: HTML5 introduced semantic elements such as <header>, <footer>,
 <article>, <section>, <nav>, etc., providing more structure to web documents.
- Multimedia Support: HTML5 includes native support for audio and video elements, reducing the reliance on third-party plugins like Flash.
- Form Enhancements: HTML5 introduced new input types, attributes, and validation features for forms, making it easier to create user-friendly and accessible forms.
- Canvas and SVG Graphics: HTML5 includes the <canvas> element for drawing graphics on the fly
 and native support for scalable vector graphics (SVG).

- Offline Web Applications: HTML5 introduced features like the Application Cache and Web Storage, enabling developers to create offline web applications.
- APIs and JavaScript Enhancements: HTML5 introduced new JavaScript APIs, such as the Geolocation API, Web Workers, and more, enhancing the capabilities of web applications.

5. What is difference between older version css and new version css?

• Older CSS (pre-CSS3):

Limited layout options: Older CSS has limited layout options and developers often rely on tables to implement complex layouts.

Basic Style: Style options are simple and contain fewer features for creating designs and effects. No query environment: The query environment that supports formatting is not available in older CSS versions.

Limited Selectors: The selector range for target HTML elements is limited to more versions than before.

No Flexbox or Grid: Layout patterns such as Flexbox and Grid were not part of the original CSS specification.

CSS3 and newer:

Responsive Design: Media query input into responsive web design allows styles to adapt to different devices and screen sizes.

Advanced Layout Options: Flexbox and Grid Layout modules provide powerful and flexible options for creating complex layouts.

Advanced selectors: CSS3 offers more selectors that allow more precise control of content. Transitions and Animations: CSS3 provides elements for creating transitions and animations that do not rely on JavaScript.

Shadow box, rounded corners, etc.: Shadow box, rounded corners, gradients, etc. Other style features including.

Procedures (panel): Specify properties (CSS variables) to define reusable values in the list. Browser compatibility improvements: While browser compatibility issues still exist, new CSS is generally better supported and consistent across modern browsers.