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1. Create a time table using HTML and CSS.

index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <link rel="stylesheet" href="styles.css">
   <title>Timetable</title>
</head>
<body>
   <header>
       <h1>Timetable</h1>
       <h2>1st Year, <a href=https://www.sjc.ac.in/computerdepartment.php</pre>
           target="_blank">M.Sc. Computer Science</a>, 2022-2024</h2>
   </header>
   <main>
       Day/Time
              9:15AM-10:05AM
              10:10AM-11:00AM
              11:05AM-11:55AM
              12PM-12:55PM
              12:55PM-1:50PM
```

```
1:50PM-2:40PM
 2:45PM-3:35PM
 3:35PM-4:30PM
 Monday
 AWT/ADBMS Lab
 AWT/ADBMS Lab
 AWT/ADBMS Lab
 AWT
 L
 ADBMS
 SPM
 ML
 Tuesday
```

```
ML Lab
 ML Lab
 >
  ML Lab
 CD
 U
 ML
 ADBMS
 Library
 Wednesday
 AWT/ADBMS Lab
 AWT/ADBMS Lab
 AWT/ADBMS Lab
 SPM
 Ν
```

```
CD
 AWT
 ML
 Thursday
 ML Lab
 ML Lab
 ML Lab
 CD
 С
 AWT
 SPM
 Library
 Friday
```

```
ADBMS
      ML
      AWT
      >
        SPM
      Н
      >
       ADBMS
      CD
      >
       Library
      </main>
</body>
</html>
```

styles.css

```
body {
    font-family: 'Lucida Sans', 'Lucida Sans Regular', 'Lucida Grande', 'Lucida Sans
Unicode', Geneva, Verdana, sans-serif;
    margin: auto;
}
header {
    padding: 5px;
    text-align: center;
    box-shadow: 10px 10px 8px #83dada;
}
table {
    width: 100%;
    max-width: 1500px;
    margin: 0 auto;
    box-shadow: 10px 10px 8px #5ca299;
}
table, th, td {
    border: 1px solid black;
    border-collapse: collapse;
    padding: 5px 3px;
    text-align: center;
}
a:default {
    color:rgb(14, 14, 85);
}
a:visited {
    color: #5ca299;
}
a:hover {
    color:rgb(189, 125, 169);
}
```

<u>Output</u>

Timetable

1st Year, M.Sc. Computer Science, 2022-2024

Day/Time	9:15AM-10:05AM	10:10AM-11:00AM	11:05AM-11:55AM	12PM-12:55PM	12:55PM-1:50PM	1:50PM-2:40PM	2:45PM-3:35PM	3:35PM-4:30PM
Monday	AWT/ADBMS Lab	AWT/ADBMS Lab	AWT/ADBMS Lab	AWT	L	ADBMS	SPM	ML
Tuesday	ML Lab	ML Lab	ML Lab	CD	U	ML	ADBMS	Library
Wednesday	AWT/ADBMS Lab	AWT/ADBMS Lab	AWT/ADBMS Lab	SPM	N	CD	AWT	ML
Thursday	ML Lab	ML Lab	ML Lab	CD	С	AWT	SPM	Library
Friday	ADBMS	ML	AWT	SPM	Н	ADBMS	CD	Library

- 2. Create a static website for an online business which includes a registration page, which contains these:
 - (a) Home (At least 3 div elements)
 - (b) Login (A Form)
 - (c) Registration Page (A Form)

index.html

```
<!DOCTYPE html>
<html lang="en">
  <head>
   <meta charset="UTF-8" />
   <meta http-equiv="X-UA-Compatible" content="IE=edge" />
   <meta name="viewport" content="width=device-width, initial-scale=1.0" />
   <link rel="preconnect" href="https://fonts.googleapis.com" />
   <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin />
   <link rel="stylesheet" href="styles.css" />
   klink
     href="https://fonts.googleapis.com/css2?family=Source+Serif+Pro&display=swa
     p"
     rel="stylesheet"
   />
   k
href="https://fonts.googleapis.com/css2?family=Montserrat:wght@300&display=swap"
rel="stylesheet">
   <link href="https://fonts.googleapis.com/css2?family=Philosopher&display=swap"</pre>
rel="stylesheet">
   <title>Wholesome Bakes</title>
  </head>
  <body>
   <header>
     <div id="navbar">
       <h1 id="nav-logo">Wholesome Bakes</h1>
       <a href="#home">Home</a>
         <a href="#products">Products</a>
         <a href="#register">Register</a>
         <a href="#contact-us">Contact Us</a>
         <a href="login.html" target="_blank">Login</a>
```

```
</div>
</header>
<main>
  <section id="home">
    <div id="home-header">
        <h2>Fresh, Delicious, Homely.</h2>
        <h3>We are committed to quality services, everywhere, all the
        time.</h3>
        <figure>
            <img src="bakery.jpg" alt="Bakery Shop">
                <figcaption>Photo by <a
                href="https://unsplash.com/fr/@blsnki?utm_source=unsplash&utm_med
                ium=referral&utm_content=creditCopyText">Yeh Xintong</a> on <a</pre>
                href="https://unsplash.com/photos/go3DT3PpIw4?utm_source=unsplash
                &utm_medium=referral&utm_content=creditCopyText">Unsplash</a>
            </figcaption>
        </figure>
    </div>
  </section>
  <section id="about-us">
  </section>
  <section id="products">
  </section>
  <section id="register">
    <div>
        <h3>Register now!</h3>
        <form action="submitted.html" method="post" onsubmit="validate()">
            <section id="personal-details">
              <label for="name"</pre>
                >Enter your name:
                <br />
                <input type="text" name="name" id="name" placeholder="Enter</pre>
                 your name..." required />
              </label>
              <label for="email"</pre>
                >Enter your email:
                <br />
                <input type="email" name="email" id="email"</pre>
                 placeholder="Enter your email..."required />
```

```
</label>
  <label for="dob"</pre>
   >Enter your date of birth:
   <br />
   <input type="date" name="dob" id="dob" required />
  </label>
</section>
<section id="gender-details">
  <label for="gender-choices">Select your gender:</label>
  <l
   <input type="radio" name="gender" id="gender-f" value="f"</pre>
   <
      <input type="radio" name="gender" id="gender-m" value="m"</pre>
      />M
   <
     <input</pre>
       type="radio"
       name="gender"
       id="gender-o"
       value="other"
     />Other
   </section>
<section id="source-section">
  <label for="sources">Where did you hear about us?</label>
  <br />
  <select name="" id="">
   <option value="">(select one)</option>
   <option value="instagram">Instagram</option>
   <option value="twitter">Twitter</option>
   <option value="facebook">Facebook</option>
   <option value="website">Our Official Website</option>
  </select>
</section>
```

```
<section id="comment-box">
              <label for="comments">Any suggestions/comments for us?</label>
              <br />
              <textarea
                name="comments-area"
                id="comments"
                cols="30"
                rows="5"
                placeholder="Enter your comments here..."
              ></textarea>
            </section>
            <section>
              <label for="password-box">Enter your password</label>
              <br />
              <input</pre>
                type="password"
                id="password-box"
                name="password-box"
                placeholder="Enter your password..."
                required
              />
            </section>
            <br />
            <section>
              <label for="confirm-pwd">Re-enter your password</label>
              <br />
              <input type="password" id="confirm-pwd" name="confirm-pwd"</pre>
               placeholder="Enter your password..."/>
            </section>
            <br />
            <section id="submit-section">
              <input type="submit" name="" id="submit-btn" value="Submit" />
            </section>
          </form>
    </div>
</section>
```

login.html

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <link rel="preconnect" href="https://fonts.googleapis.com" />
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin />
    <link rel="stylesheet" href="styles.css" />
    k
      href="https://fonts.googleapis.com/css2?family=Source+Serif+Pro&display=swap"
      rel="stylesheet"
    />
    k
      href="https://fonts.googleapis.com/css2?family=Montserrat:wght@300&display=swap
      " rel="stylesheet"
    />
    k
      href="https://fonts.googleapis.com/css2?family=Philosopher&display=swap"
      rel="stylesheet"
    />
    <title>Login</title>
  </head>
  <body>
    <header id="login-header">
      <h1>Welcome to Wholesome Bakes!</h1>
    </header>
    <main>
      <section id="login-screen">
        <section id="login">
          <div>
            <h3>Log In</h3>
            <form action="submitted.html" method="post" onsubmit="validate()">
              <section id="personal-details">
                <label for="email"</pre>
                  >Enter your email:
                  <br />
                  <input</pre>
```

```
type="email"
                    name="email"
                    id="email"
                    placeholder="Enter your email..."
                    required
                  />
                </label>
              </section>
              <br />
              <section>
                <label for="password-box">Enter your password</label>
                <br />
                <input
                  type="password"
                  id="password-box"
                  name="password-box"
                  placeholder="Enter your password..."
                  required
                />
              </section>
              <br />
              <section id="submit-section">
                <input type="submit" name="" id="submit-btn" value="Submit" />
              </section>
            </form>
          </div>
        </section>
      </section>
    </main>
  </body>
</html>
```

styles.css

```
* {
 box-sizing: border-box;
}
html,
::before,
::after {
 box-sizing: inherit;
}
body {
  margin: 0;
  font-family: "Philosopher", sans-serif;
 background-color: #3a071b;
}
#navbar {
  display: grid;
  grid-template-columns: auto auto;
  align-items: center;
  background-color: #3a071b;
  background-size: cover;
  position: fixed;
  height: 12vh;
  width: 100vw;
  max-width: 100%;
}
#navbar #nav-logo {
  padding: 0 0.5rem 0 0.5rem;
  text-transform: uppercase;
  color: #ecd4f1;
  font-size: clamp(0.5rem, 10rem, 2rem);
}
#navbar #nav-list {
  display: flex;
  flex-direction: row;
```

```
justify-content: space-evenly;
  align-items: center;
}
#nav-list li {
  list-style-type: none;
  text-transform: uppercase;
  font-size: clamp(0.2rem, 5rem, 1.1rem);
  font-weight: bold;
}
#nav-list a {
  text-decoration: none;
  color: #ecd4f1;
}
#nav-list a:hover {
  text-shadow: 1px 0.1px 5px rgba(255, 255, 255, 0.541);
}
#home {
  height: 110vh;
  width: 100vw;
  max-width: 100%;
  padding-top: 4.5rem;
  background-color: #d1bcd6;
}
#home #home-header {
  display: flex;
  flex-direction: column;
  text-align: center;
  font-family: "Source Serif Pro", serif;
}
#home-header h2,
#home-header h3 {
  margin: 0;
#home-header h2 {
```

```
padding-top: 1rem;
  text-shadow: 1px 0.1px 5px #ffffff;
}
#home-header h3 {
  padding-top: 0.4rem;
  padding-bottom: 0.2rem;
  text-shadow: 1px 0.1px 5px #ffffff;
}
#home figure figcaption {
  font-family: "Source Serif Pro", serif;
  font-family: "Philosopher", sans-serif;
  font-size: clamp(0.1rem, 1rem, 0.6rem);
  color: rgba(0, 0, 0, 0.432);
}
#home figure figcaption a {
  color: rgba(0, 0, 0, 0.432);
  text-decoration: none;
}
#register {
  height: 120vh;
  background: #a36e84;
}
#register div,
#login div {
  display: flex;
  flex-direction: column;
  align-items: center;
}
#register div h3,
#login div h3 {
  text-transform: uppercase;
  font-size: clamp(1rem, 6rem, 2rem);
  text-shadow: 1px 0.5px 3px #ecd4f1;
}
```

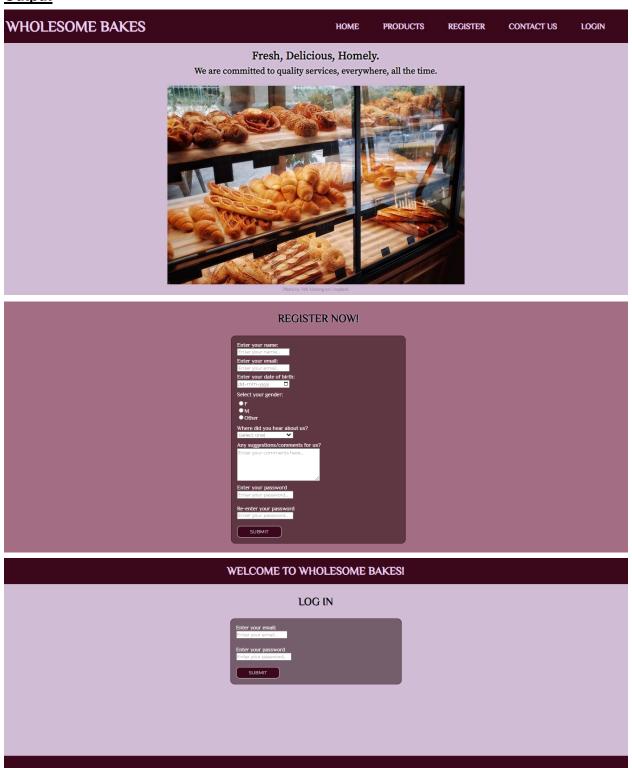
```
form {
  background-color: rgba(25, 0, 0, 0.5);
  color: rgb(255, 255, 255);
  border: 1px solid #3a071b8e;
  border-radius: 13px;
  display: block;
  margin: 0 auto;
  width: 500px;
  padding: 1rem 1rem;
  font-family: "Source Serif Pro", serif;
  font-family: "Philosopher", sans-serif;
}
input {
  font-family: "Montserrat", sans-serif;
}
#personal-details label {
  display: block;
  padding-bottom: 5px;
}
#personal-details input {
  width: 150px;
}
#gender-details {
  margin-top: 5px;
}
#gender-details label {
  display: block;
  margin-bottom: -10px;
}
#gender-details ul {
  padding-left: 0;
}
#gender-details li {
  list-style-type: none;
```

```
}
#class-details {
  margin-top: -7px;
}
#class-details label {
  display: block;
  margin-bottom: -10px;
}
#class-details ul {
  padding-left: 0;
}
#class-details li {
  list-style-type: none;
}
#source-section {
  display: block;
  margin-top: -5px;
  margin-bottom: 15px;
}
#source-section select {
  font-family: "Montserrat", sans-serif;
}
#source-section option {
  font-family: "Montserrat", sans-serif;
  color: black;
  font-weight: 600;
}
#comment-box {
  margin-top: -5px;
  margin-bottom: 5px;
}
#comment-box textarea {
```

```
font-family: "Montserrat", sans-serif;
  color: black;
}
#submit-btn {
  background: #3a071b;
  background-size: cover;
  background-repeat: no-repeat;
  color: aliceblue;
  border: 1px solid #d1bcd6;
  border-radius: 10px;
  width: 7vw;
  height: 4vh;
  text-transform: uppercase;
}
#submit-btn:hover {
  background-size: cover;
  background-repeat: no-repeat;
  color: #3a071b;
  background-color: #d1bcd6;
  border: 1px solid #3a071b;
}
#login-header,
#login-screen {
  display: flex;
  flex-direction: column;
  /* background: #a36e84; */
  align-items: center;
}
#login-header {
  color:#ecd4f1;
}
#login-header h1 {
  text-transform: uppercase;
}
#login-screen #yum {
```

```
color:#ecd4f1;
}
#login-screen #login-msg {
  color: #3a071b;
}
#login {
  height: 60vh;
  width: 100vw;
  background-color: #d1bcd6;
}
```

<u>Output</u>



3. Create a static webpage for an online bookstore which contains a catalogue of available books.

index.html

```
<!DOCTYPE html>
<html lang="en">
  <head>
   <meta charset="UTF-8" />
   <meta http-equiv="X-UA-Compatible" content="IE=edge" />
   <meta name="viewport" content="width=device-width, initial-scale=1.0" />
   <link rel="preconnect" href="https://fonts.googleapis.com" />
   <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin />
   <link rel="stylesheet" href="styles.css" />
   k
     href="https://fonts.googleapis.com/css2?family=Montserrat:wght@300&display=swap
     " rel="stylesheet"
   />
   k
     href="https://fonts.googleapis.com/css2?family=IBM+Plex+Mono:wght@200&display=s
     wap"
     rel="stylesheet"
   />
   k
     href="https://fonts.googleapis.com/css2?family=Rokkitt:wght@100&display=swap"
     rel="stylesheet"
   />
   <link href="https://fonts.googleapis.com/css2?family=Roboto+Mono&display=swap"</pre>
    rel="stylesheet">
   <title>Bookworm</title>
  </head>
  <body>
   <header>
     <div id="navbar">
       <h1 id="nav-logo">Bookworm</h1>
       <a href="#home">Home</a>
         <a href="#books">Books</a>
         <a href="#register">Register</a>
         <a href="#contact-us">Contact Us</a>
         <a href="login.html" target="_blank">Login</a>
```

```
</div>
</header>
<main>
 <section id="home">
   <div id="home-header">
     <figure>
        <img src="bookstore.jpg" alt="Book Store" />
        <figcaption>
          Photo by
          <a
           href="https://unsplash.com/@ninjason?utm_source=unsplash&utm_medium=r
           eferral&utm_content=creditCopyText"
           >Jason Leung</a
          >
          on
          ≺a
           href="https://unsplash.com/photos/gWZzETD0Ad4?utm source=unsplash&utm
            _medium=referral&utm_content=creditCopyText"
           >Unsplash</a
       </figcaption>
     </figure>
     <h2>Enter a world, of your choice...</h2>
   </div>
 </section>
 <section id="about-us"></section>
 <section id="books">
   <div>
     <l
       <
          <figure>
              src="https://images-na.ssl-images-
              amazon.com/images/S/compressed.photo.goodreads.com/
              books/1542542538i/42857229.jpg"
              alt=""
           />
            <figcaption>The Year of the Ladybird, Graham Joyce</figcaption>
          </figure>
```

```
<
       <figure>
           <img
             src="https://m.media-amazon.com/images/W/IMAGERENDERING_521856-
             T1/images/I/51I9fQLhnpL.jpg"
             alt=""
           />
           <figcaption>Inception (The Marked Saga Book 1), Bianca
            Scardoni</figcaption>
         </figure>
   <figure>
       <img
         src="https://m.media-amazon.com/images/W/IMAGERENDERING_521856-
         T1/images/I/81tNBrrGSJL.jpg"
         alt=""
       />
       <figcaption>The Loser, Thomas Bernhard</figcaption>
     </figure>
 </div>
<div>
 <l
   <figure>
       <img
         src="https://m.media-amazon.com/images/W/IMAGERENDERING_521856-
         T1/images/I/71SCqfZfHEL.jpg"
         alt=""
       />
       <figcaption>Atonement, Ian McEwan</figcaption>
     </figure>
   <figure>
         src="https://m.media-amazon.com/images/W/IMAGERENDERING_521856-
         T1/images/I/71kW3I8WH5L.jpg"
         alt=""
       />
       <figcaption>Gilead, Marilynne Robinson</figcaption>
     </figure>
   <figure>
       <img
```

```
src="https://m.media-amazon.com/images/W/IMAGERENDERING_521856-
           T1/images/I/51GTpkH-JJL._SX343_B01,204,203,200_.jpg"
           alt=""
         />
         <figcaption>The Fire Eternal, Chris d'Lacey</figcaption>
       </figure>
   </div>
 <div>
   <l
     <figure>
         <img
           src="https://m.media-amazon.com/images/W/IMAGERENDERING_521856-
           T1/images/I/91ZaXXD8K8L.jpg"
           alt=""
         />
         <figcaption>Ringworld, Larry Niven</figcaption>
       </figure>
     <figure>
         <img
           src="https://m.media-amazon.com/images/W/IMAGERENDERING_521856-
           T1/images/I/71mWiiUV9ZL.jpg"
           alt=""
         />
         <figcaption>History Is All You Left Me, Adam Silvera</figcaption>
       </figure>
     <figure>
         <img
           src="https://m.media-amazon.com/images/W/IMAGERENDERING_521856-
           T1/images/I/71XtGTK80pL.jpg"
           alt=""
         <figcaption>Trainspotting, Irvine Welsh</figcaption>
       </figure>
   </div>
</section>
<section id="register">
 <div>
   <h3>Register now!</h3>
   <form action="submitted.html" method="post" onsubmit="validate()">
```

```
<section id="personal-details">
  <label for="name"</pre>
    >Enter your name:
    <br />
    <input
      type="text"
      name="name"
      id="name"
      placeholder="Enter your name..."
      required
   />
  </label>
  <label for="email"</pre>
    >Enter your email:
    <br />
    <input</pre>
      type="email"
      name="email"
      id="email"
      placeholder="Enter your email..."
      required
   />
  </label>
  <label for="dob"</pre>
    >Enter your date of birth:
    <br />
    <input type="date" name="dob" id="dob" required />
  </label>
</section>
<section id="gender-details">
  <label for="gender-choices">Select your gender:</label>
  <l
    <
      <input type="radio" name="gender" id="gender-f" value="f" />F
    <
      <input type="radio" name="gender" id="gender-m" value="m" />M
    <input</pre>
```

```
type="radio"
        name="gender"
        id="gender-o"
        value="other"
      />Other
    </section>
<section id="source-section">
  <label for="sources">Where did you hear about us?</label>
  <br />
  <select name="" id="">
    <option value="">(select one)</option>
    <option value="instagram">Instagram</option>
    <option value="twitter">Twitter</option>
    <option value="facebook">Facebook</option>
    <option value="website">Our Official Website</option>
  </select>
</section>
<section id="comment-box">
  <label for="comments">Any suggestions/comments for us?</label>
  <br />
  <textarea
    name="comments-area"
    id="comments"
    cols="30"
    rows="5"
    placeholder="Enter your comments here..."
  ></textarea>
</section>
<section>
  <label for="password-box">Enter your password</label>
  <br />
  <input</pre>
    type="password"
    id="password-box"
    name="password-box"
    placeholder="Enter your password..."
```

```
required
              />
            </section>
            <br />
            <section>
              <label for="confirm-pwd">Re-enter your password</label>
              <br />
              <input
                type="password"
                id="confirm-pwd"
                name="confirm-pwd"
                placeholder="Enter your password..."
              />
            </section>
            <br />
            <section id="submit-section">
              <input type="submit" name="" id="submit-btn" value="Submit" />
            </section>
          </form>
        </div>
      </section>
    </main>
    <footer>
      <section id="contact-us"></section>
    </footer>
  </body>
</html>
```

styles.css

```
* {
   box-sizing: border-box;
 }
 html,
  ::before,
  ::after {
   box-sizing: inherit;
 }
 body {
    margin: 0;
   font-family: 'IBM Plex Mono', monospace;
    background-color: #7591ec;
 }
 #navbar {
    display: grid;
    grid-template-columns: auto auto;
    align-items: center;
    background-color: #07153a;
    background-size: cover;
    position: fixed;
    height: 13vh;
   width: 100vw;
    max-width: 100%;
 }
 #navbar #nav-logo {
    padding: 0 0.5rem 0 0.5rem;
    text-transform: uppercase;
   color: #ffffff;
   font-size: clamp(0.5rem, 10rem, 2rem);
 }
 #navbar #nav-list {
    display: flex;
    flex-direction: row;
    justify-content: space-evenly;
```

```
align-items: center;
}
#nav-list li {
  list-style-type: none;
 text-transform: uppercase;
 font-size: clamp(0.2rem, 5rem, 1.1rem);
 font-weight: bold;
}
#nav-list a {
 text-decoration: none;
  color: #ffffff;
}
#nav-list a:hover {
  text-shadow: 1px 0.1px 5px rgba(255, 255, 255, 0.541);
}
#home {
  height: 105vh;
 width: 100vw;
  max-width: 100%;
  padding-top: 4.5rem;
  background-color: #bfccf7;
}
#home #home-header {
  display: flex;
  flex-direction: column;
  text-align: center;
  font-family: 'IBM Plex Mono', monospace;
  font-style: italic;
 letter-spacing: 0.2rem;
 /* font-family: 'Rokkitt', serif;
}
#home-header h2,
#home-header h3 {
  margin: 0;
  font-weight: 600;
```

```
}
  #home figure {
    margin-bottom: 0;
    padding-bottom: 1.4rem;
}
  #home figure figcaption {
    font-family: 'Rokkitt', serif;
    font-size: clamp(0.1rem, 1rem, 0.7rem);
    font-weight: 600;
    color: #00000085;
  }
  #home figure figcaption a {
    color: rgba(0, 0, 0, 0.774);
    text-decoration: none;
  }
  #books {
    display: grid;
    grid-template-columns: auto auto;
    height: 150vh;
    padding-top:1rem;
    background-color: #07153a;
}
  #books li {
    list-style-type: none;
  }
  #books figure {
    display: flex;
    flex-direction: column;
    align-items: center;
  }
  #books figure figcaption{
    padding-top: 0.1rem;
    color:#b0c1f8;
```

```
font-size: clamp(0.2rem, 1rem, 0.7rem);
    font-family: 'Roboto Mono', monospace;
    font-style: italic;
    letter-spacing: 0.5px;
}
  #books img {
    height: 40vh;
   width:fit-content;
  }
  #register {
    height: 120vh;
    background-color: #7591ec;
  }
  #register div,
  #login div {
    display: flex;
    flex-direction: column;
    align-items: center;
  }
  #register div h3,
  #login div h3 {
    text-transform: uppercase;
    font-size: clamp(1rem, 6rem, 2rem);
    text-shadow: 1px 0.5px 3px #07153abd;
  }
  form {
    background-color: #07153abd;
    color: rgb(255, 255, 255);
    border: 1px solid #07153ac2;
    border-radius: 13px;
    display: block;
    margin: 0 auto;
    width: 500px;
    padding: 1rem 1rem;
    font-family: 'Rokkitt', serif;
```

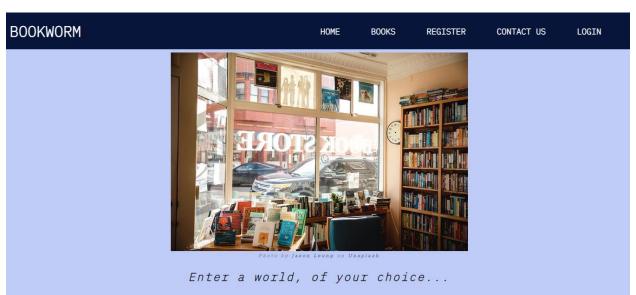
```
font-weight: 500;
  font-size: clamp(0.5rem, 3rem, 1.2rem);
}
input {
  font-family: "Montserrat", sans-serif;
}
#personal-details label {
  display: block;
  padding-bottom: 5px;
}
#personal-details input {
  width: 150px;
}
#gender-details {
  margin-top: 5px;
}
#gender-details label {
  display: block;
 margin-bottom: -10px;
}
#gender-details ul {
  padding-left: 0;
}
#gender-details li {
  list-style-type: none;
}
#class-details {
  margin-top: -7px;
}
#class-details label {
  display: block;
  margin-bottom: -10px;
```

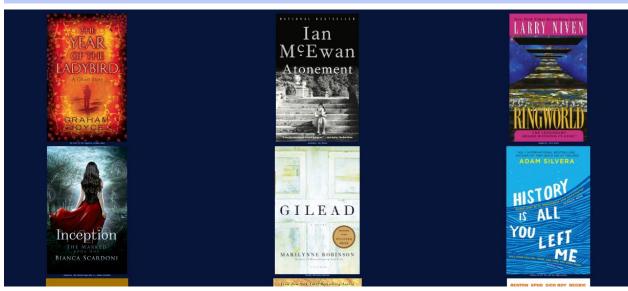
```
}
#class-details ul {
  padding-left: 0;
}
#class-details li {
  list-style-type: none;
}
#source-section {
  display: block;
  margin-top: -5px;
 margin-bottom: 15px;
}
#source-section select {
  font-family: "Montserrat", sans-serif;
}
#source-section option {
  font-family: "Montserrat", sans-serif;
  color: black;
  font-weight: 600;
}
#comment-box {
  margin-top: -5px;
  margin-bottom: 5px;
}
#comment-box textarea {
  font-family: "Montserrat", sans-serif;
  color: black;
}
#submit-btn {
  background: #07153a;
  background-size: cover;
  background-repeat: no-repeat;
  color: aliceblue;
```

```
border: 1px solid #7591ec;
  border-radius: 10px;
  width: 7vw;
  height: 4vh;
  text-transform: uppercase;
}
#submit-btn:hover {
  background-size: cover;
  background-repeat: no-repeat;
  color: #07153a;
  background-color: #7591ec;
  border: 1px solid #07153a;
}
#login-header,
#login-screen {
  display: flex;
 flex-direction: column;
 /* background: #a36e84; */
  align-items: center;
}
#login-header {
  color:#ecd4f1;
}
#login-header h1 {
  text-transform: uppercase;
}
#login-screen #yum {
  color:#ecd4f1;
}
#login-screen #login-msg {
  color: #3a071b;
}
#login {
  height: 60vh;
```

```
width: 100vw;
background-color: #d1bcd6;
}
```

<u>Output</u>





4. Write a Javascript program to convert numbers to Roman numerals.

convert.js

```
function convertToRoman(num) {
   var l = [1000,900,500,400,100,90,50,40,10,9,5,4,1];
   var sym = ['M','CM','D','CD','C','XC','L','XL','X','IX','V','IV','I']
   var str = "";
   let i = 0;
   while(num>0){
     if(l[i]<=num){
       str+=sym[i];
      num-=l[i];
     }
     else{
      i++;
     }
   }
   return str;
   }
console.log(convertToRoman(36));
```

Output

```
[Running] node "c:\Users\Adelicia\Documents\Projects\msc-sem-2\app.js"
XXXVI
[Done] exited with code=0 in 0.22 seconds
```

5. Write a Javascript program to validate a form, which satisfies the conditions:

- (a) Name should only contain alphabets.
- (b) Password should not be less than 6 characters length.
- (c) E-mail id must follow the pattern name @domain.com.
- (d) Phone number should contain 10 digits only.
- (e) Last Name and Address should not be empty.

index.html

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <link rel="stylesheet" href="styles.css" />
    <link rel="preconnect" href="https://fonts.googleapis.com" />
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin />
    k
      href="https://fonts.googleapis.com/css2?family=Nunito&display=swap"
      rel="stylesheet"
    />
    link
      rel="shortcut icon"
      href="https://cdn-icons-png.flaticon.com/512/9318/9318633.png"
      type="image/x-icon"
    />
    <title>Webvy</title>
    <script>
        const validate = () =>{
            const phVal = document.getElementById('number').value;
            const pwdVal = document.getElementById('pwd').value;
            const fnameVal = document.getElementById('name').value;
            if (String(phVal).length != 10){
                alert("Phone no. should have 10 digits");
                return false;
            }
            if (fnameVal.length < 7){</pre>
                alert("First name has to be 6 charaters long!");
```

```
return false;
          }
          if (!/^[a-zA-z]*$/g.test(fnameVal)){
              alert("First name has to be characters only!");
              return false;
          }
          if(pwdVal.length < 7){</pre>
               alert("Password should be greater than 6 characters!");
              return false;
          }
          return true;
      }
 </script>
</head>
<body>
 <main>
   <div id="form-heading">
      <h1 id="title">Webvy Registration</h1>
      For Students
   </div>
   <form action="#index.html" id="survey-form" method="post" onsubmit="return
    validate()">
      <div id="form-body">
        <fieldset id="personal-details">
          <h2>Personal Details</h2>
          <hr>>
           <label id="name-label" for="name"</pre>
            >First Name
            <input</pre>
              id="name"
              type="text"
              placeholder="Enter your first name"
              required
            />
           </label>
           <label id="lname-label" for="lname"</pre>
            >Last Name
            <input</pre>
```

```
id="lname"
      type="text"
      placeholder="Enter your last name"
      required
    />
  </label>
  <label id="email-label" for="email"</pre>
    >Email
    <input
      id="email"
      type="email"
      placeholder="Enter your email"
      required
    />
  </label>
  <label id="number-label" for="number"</pre>
    >Phone No.
    <input
      id="phone"
      type="phone"
      placeholder="Enter your number"
      required
    />
  </label>
   <label id="pwd-label" for="pwd"</pre>
    >Password
    <input</pre>
      id="pwd"
      type="password"
      placeholder="Enter your password"
      required
    />
  </label>
</fieldset>
<fieldset id="learning-details">
  <h2>Learning Progress</h2>
  <hr>>
  <label id="radio-buttons" class="learning-q">
    Are you currently learning web development?
    <label for="yes-web">
```

```
<input type="radio" name="recs" id="yes-adopt" value="yes" />
    Yes
  </label>
  <label for="no-web">
    <input type="radio" name="recs" id="no-adopt" value="no" />
    No
  </label>
</label>
<label id="checkbox-options" class="learning-q">
  What have you learnt so far?
  <label for="html-skill">
    <input
      type="checkbox"
      name="skill-set"
      id="html-skill"
      value="html-skill"
    />
    HTML
  </label>
  <label for="css-skill">
    <input</pre>
      type="checkbox"
      name="skill-set"
      id="css-skill"
      value="css-skill"
    />
    CSS
  </label>
  <label for="js-skill">
    <input</pre>
      type="checkbox"
      name="skill-set"
      id="js-skill"
      value="js-skill"
    />
    Javascript
  </label>
  <label for="frameworks">
    <input</pre>
      type="checkbox"
```

```
id="frameworks"
                  value="frameworks"
                Frameworks(Bootstrap, React, etc..)
              </label>
            </label>
            <label for="dropdown" class="learning-q">
              What do you find most difficult to learn?
              <select id="dropdown" name="dropdown" >
                <option value="" name="options">(select one)</option>
                <option value="1" name="options">The Box Model</option>
                <option value="3" name="options">Grid and Flexbox</option>
                <option value="2" name="options">Javascript programming
                <option value="2" name="options">None of the above</option>
              </select>
            </label>
          </fieldset>
          <fieldset id="student-feedback">
            <h2>About Me</h2>
            <hr>>
            <label for="feedback">
              Please tell us about yourself and how got into web development
              <textarea
                name="feedback"
                id="feedback"
                cols="45"
                rows="10"
                placeholder="Enter your feedback here..."
                required
              ></textarea>
            </label>
          </fieldset>
          <fieldset id="submit-button"><button id="submit" type="submit">
           Submit</button>
          </fieldset>
        </div>
      </form>
    </main>
  </body>
</html>
```

name="skill-set"

styles.css

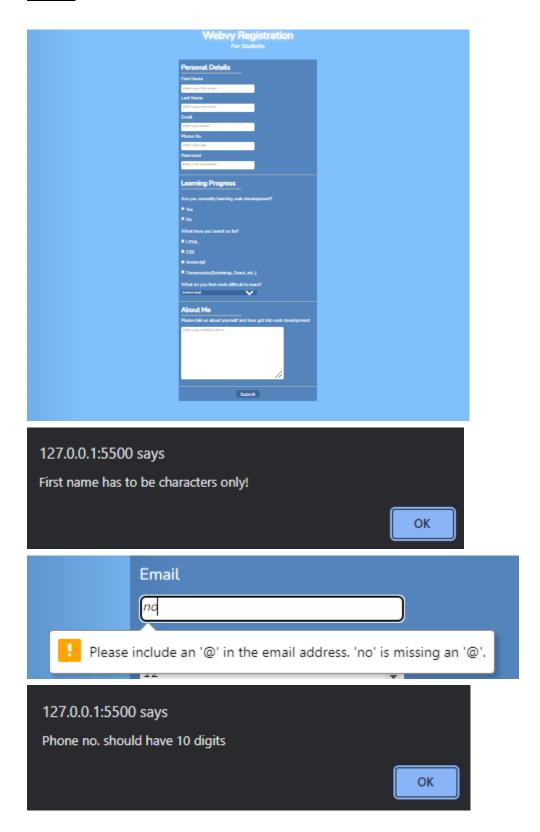
```
html {
 box-sizing: border-box;
}
*,
::before,
::after {
 box-sizing: inherit;
}
body {
  background-image: linear-gradient(
    90deg,
   #1c3c6b 0%,
   #7ebffc 35%,
   #7ebffc 50%,
   #7ebffc 70%,
   #1c3c6b 100%
  );
  background-color: white;
  background-size: cover;
  margin: 0;
  font-family: "Nunito", sans-serif;
  color: white;
}
#form-heading {
 text-align: center;
  margin: 0 auto;
}
#form-heading h1 {
  margin-top: -0.1rem;
  font-size: 2.3rem;
  color: white;
  text-shadow: 1px 0.1px 20px #ffffffe1;
}
```

```
#form-heading p {
  margin-top: -1.7rem;
  font-size: 1.3rem;
  font-weight: 600;
  color: #ffffffe1;
}
#form-body {
  margin-top: -1.5rem;
  background: #1c3c6b70;
 border-radius: 5px;
}
form {
  width: 50vw;
  max-width: 500px;
  min-width: 350px;
  margin: 0 auto;
 padding: 1% 0;
}
form h2 {
  margin-top: 1px;
  margin-bottom: 0;
}
form hr {
  width: 45%;
  margin: 0 0 5px 0;
 opacity: 45%;
}
fieldset {
  border: none;
  padding: 0.7rem 0.5rem;
  border-bottom: 1px solid rgba(226, 215, 175, 0.5);
}
label {
  display: block;
  margin: 0.5rem 0;
```

```
}
input,
select,
textarea {
  font-size: small;
  font-style: italic;
  margin: 10px 0 0 0;
  font-family: "Nunito", sans-serif;
 border-radius: 5px;
 border: 1px solid transparent;
}
#name,
#lname,
#email,
#phone,
#pwd {
 display: block;
 width: 55%;
 padding-bottom: 1%;
}
#learning-details .learning-q {
  padding-top: 15px;
}
select#dropdown {
  display: block;
  background: #1c3c6b70;
  color: white;
 width: 57%;
 border: none;
  font-family: "Nunito", sans-serif;
}
#submit-button {
  border-bottom: none;
}
#submit {
```

```
border: none;
display: block;
height: 20%;
width: 85px;
text-align: center;
margin: 0 auto;
font-family: "Nunito", sans-serif;
background: #1c3c6b70;
color: white;
font-size: 17px;
border-radius: 10px;
}
button#submit:hover {
 background: #7ebffc;
}
```

<u>Output</u>



6. Write a Javascript program to demonstrate pop-up boxes, for the following:

- (a) Display date
- (b) Factorial of a number
- (c) A multiplication table of numbers from 1 to 10
- (d) Sum of n numbers

popupboxes.html

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Pop up box demo</title>
</head>
<body>
   <h1 style="text-align: center;">This webpage demonstrates the use of the
    following</h1>
   <div style="width: 50%; display: flex; justify-content: center; flex-</pre>
        direction: column;">
          Prompts
           Alert
          Confirm box
       </div>
   <div style="display: flex; justify-content: center;">
       <button style="padding: 6px; margin: 16px;" onclick="displayDate()">Click
       here to see today's date</button>
       <button style="padding: 6px; margin: 16px;" onclick="promtDemo()">Click this
        find factorial of a number</button>
       <button style="padding: 6px; margin: 16px;" onclick="alertDemo()"</pre>
        onmouseout="mouseOut()">Click this to see
          multiplication table</button>
       <button style="padding: 6px; margin: 16px;" onclick="confirmDemo()"</pre>
        onmouseout="mouseOut()">Click this to find
          sum of 2 numbers
   </div>
   <div style="display: flex; justify-content:center; align-items: center;">
       <div style="text-align: center; width: 50%; text-align: right;">
          Outputbox =>  
       </div>
       <div id="outputBox" style="margin-right: auto; border: 1px visible; border-</pre>
        style: solid; text-align: center; vertical-align: middle; width:
          150px; height: 25px; ">
       </div>
   </div>
```

```
<script>
        const promtDemo = () => {
            let n = window.prompt(" Enter the number for which factorial is to be
            calculated");
            console.log("your number is " + n);
            let fact = 1;
            for (let i = n; i > 1; i--) {
                fact *= i;
            window.alert(n + " factorial is " + fact);
        const alertDemo = () => {
            let n = window.prompt("Enter the number for which multiplication table is
            to be calculated");
            str = "";
            for (let i = 1; i <= 10; i++) {
                str += `${n} x ${i} = {n * i} \n`;
            window.alert(str);
        }
        const confirmDemo = () => {
            let num1 = window.prompt("Enter number 1");
            if (window.confirm("Press ok if num2 = 10\n press cancel if num2 = 20"))
                num2 = 10;
            }
            else {
                num2 = 20;
            };
            num1 = parseInt(num1);
            num2 = parseInt(num2);
           window.alert(num1 + " + " + num2 + " = " + (num1 + num2));
        const displayDate = () => {
            date = new Date();
            day = date.getDate();
            month = date.getMonth() + 1;
            year = date.getFullYear();
            document.getElementById('outputBox').innerHTML = `${day} : ${month} :
            ${year}`;
        }
    </script>
</body>
</html>
```

7. Create a simple calculator.

calculator.html

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Calculator</title>
    <style>
      .container {
        display: flex;
        justify-content: center;
        align-items: center;
        height: 100vh; /* Hack to vertically centre [center] */
      #calculator {
        justify-self: center;
        width: fit-content;
        height: fit-content;
        background-color: black;
        border-radius: 8px;
        padding: 8px;
        font-family: "Courier New", Courier, monospace;
        box-shadow: 2px 4px 8px black; /* offset-x offset-y shadow-radius
color*/
      button {
       background: darkmagenta;
        color: white;
        border: none;
        border-radius: 2px;
        padding: 8px;
        width: calc(4em + 8px);
        justify-content: center;
       margin: 4px 2px;
      .last {
       width: calc(2em + 8px);
      #clear,
      #equals {
        background-color: deeppink;
      #display {
        display: inline-block;
        background-color: white;
```

```
padding: 8px;
      text-align: end;
      margin: 4px 2px;
      border-radius: 2px;
      color: black;
      width: calc(12em + 4px);
  </style>
</head>
<body>
  <div class="container">
    <div id="calculator">
      <div>
        <div id="display">1234567890</div>
        <button class="last" id="clear">C</button>
      </div>
      <div>
        <button type="button">1</button>
        <button type="button">2</button>
        <button type="button">3</button>
        <button type="button" class="last">/</button>
      </div>
      <div>
        <button type="button">4</button>
        <button type="button">5</button>
        <button type="button">6</button>
        <button type="button" class="last">-</button>
      </div>
      <div>
        <button type="button">7</button>
        <button type="button">8</button>
        <button type="button">9</button>
        <button type="button" class="last">+</button>
      </div>
      <div>
        <button type="button">.</button>
        <button type="button">0</button>
        <button type="button" id="equals">=</button>
        <button type="button" class="last">*</button>
      </div>
    </div>
  </div>
</body>
```

</html>

Output



8. Create a portfolio website. Demonstrate use of inline, internal and external CSS stylesheets.

index.html

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <link rel="stylesheet" href="styles.css" />
    <link rel="preconnect" href="https://fonts.googleapis.com" />
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin />
     href="https://fonts.googleapis.com/css2?family=Montserrat&display=swap"
     rel="stylesheet"
    />
    link
     href="https://fonts.googleapis.com/css2?family=Unbounded&display=swap"
     rel="stylesheet"
    <title>Portfolio</title>
  </head>
  <body>
    <!-- HEADER -->
    <header>
      <nav id="navbar">
        <a href="#welcome-section" class="nav-link">About</a>
         <a href="#projects-section" class="nav-link">Projects</a>
         <a href="#contact-section" class="nav-link">Contact</a>
       </nav>
    </header>
    <!-- MAIN -->
    <main>
     <!-- ABOUT ME -->
      <section id="welcome-section">
       <h1>Hi! I'm Ady.</h1>
       <h2>An aspiring <span class="special-text">web developer</span>.</h2>
      </section>
      <!-- PROJECTS -->
      <section id="projects-section">
        <h2>These are some of my projects.</h2>
        <div id="project-grid">
         ≺a
           href="https://codepen.io/codeyady/full/YzjYXwm"
           target=" blank"
           class="project-tile"
            <img src="https://shots.codepen.io/codeyady/pen/YzjYXwm-</pre>
            1280.webp?version=1674412125" alt="Project-1" />
```

```
FCC Documentation Page
          </a>
          ≺a
            href="https://codepen.io/codeyady/full/ZEjvwqj"
            target="_blank"
            class="project-tile"
            ><img src="https://shots.codepen.io/codeyady/pen/ZEjvwqj-</pre>
              512.webp?version=1675013670" alt="Project-2" />
            FCC Survey Form
          </a>
          ≺a
            href="https://codepen.io/codeyady/full/VwBzmqM"
            target=" blank"
            class="project-tile"
            ><img src=" https://shots.codepen.io/codeyady/pen/VwBzmqM-</pre>
              512.webp?version=1674315629" alt="Project-3" />
            Silly Cat Page
          </a>
        </div>
        <div id="codepen-box">
          <a href="https://codepen.io/codeyady" id="codepen-link">Show all</a>
        </div>
      </section>
      <!-- CONTACT ME -->
      <section id="contact-section">
        <h2>Find me on...</h2>
        <div id="profile-list">
            href="https://github.com/adelicia-js"
            class="profile-link"
            target="_blank"
            ><img src="https://cdn-icons-png.flaticon.com/512/2111/2111432.png"</pre>
              alt=""> </a
          >
          ≺a
            href="https://codepen.io/codeyady"
            class="profile-link"
            target=" blank"
            ><img src="https://cdn-icons-png.flaticon.com/512/2111/2111501.png"</pre>
              alt=""> </a
        </div>
      </section>
    </main>
  </body>
</html>
```

styles.css

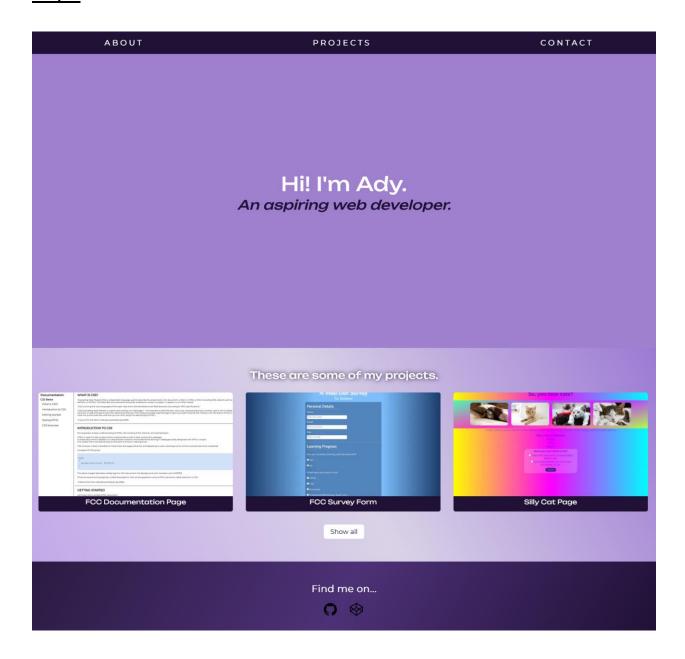
```
html {
    box-sizing: border-box;
}
*, ::before, ::after {
   box-sizing: inherit;
}
body {
    margin: 0;
    padding: 0;
    font-family: 'Montserrat', sans-serif;
    background: rgba(9, 183, 252, 0.1);
    width: 100%;
    height: auto;
    background-size: cover;
}
/* NAV BAR */
#navbar {
    display: flex;
    justify-content: center;
    position: fixed;
    top: 0;
    left: 0;
    width: 100%;
    background-color: #201136;
    z-index: 10;
    overflow: hidden;
}
#nav-list {
    display: flex;
    gap: 25rem;
}
#nav-list li {
    list-style-type: none;
    margin-right: 1rem;
    font-weight: 600;
    padding-left: 0;
}
.nav-link {
    font-size: 1.2rem;
    color: rgb(255, 255, 255);
    text-decoration: none;
    text-transform: uppercase;
    letter-spacing: 0.3rem;
.nav-link:hover {
```

```
color: #9f80cf;
    text-shadow: 1px 0.1px 5px #201136,0 0 2px #201136, 0 0 2px #fffffff;
}
/* MAIN */
/* WELCOME */
#welcome-section {
    display: flex;
    width: 100%;
    height: 100vh;
    flex-direction: column;
    justify-content: center;
    align-items: center;
    background-color: black;
    /* background-image: #9f80cf; */
    background-image: linear-gradient(62deg, #9f80cf 0%, #9f80cf 50%, #9f80cf 100%);
    padding: 5rem;
    margin: 0;
}
#welcome-section h1, #welcome-section h2 {
    font-family: 'Unbounded',sans-serif;
    text-align: center;
}
#welcome-section h1{
    font-size: 3rem;
    color: white;
    margin-bottom: 0;
}
#welcome-section h2 {
    font-size: 2rem;
    font-style: oblique;
    color: #201136;
    margin-top: 0.1rem;
}
/* PROJECTS */
#projects-section {
    /* width: 100%; */
    /* height: 70vh; */
    text-align: center;
    padding: 2rem 1rem;
    background-color: rgb(0, 0, 0);
    background-image: linear-gradient(62deg, #c2a9e9 0%, #dad3e7 50%, #9c7ad4 100%);
}
#projects-section h2 {
    color: white;
    /* text-shadow: 1px 0.1px 10px #ffae00; */
    text-shadow: 1px 0.1px 10px #201136;
    font-family: 'Unbounded', sans-serif;
    padding-bottom: 0.5rem;
```

```
}
#project-grid {
    display: grid;
    width: 100%;
    max-width: 1500px;
    margin: 0;
    margin-bottom: 1rem;
    grid-template-columns: repeat(auto-fit, minmax(350px, 1fr));
    gap: 2rem;
    padding-bottom: 0.5rem;
}
.project-tile {
    background-color: #201136;
    border-radius: 5px;
    text-decoration: none;
}
.project-tile img {
    width: 100%;
    height: 87%;
    object-fit: cover;
    border-radius: 5px 5px 0 0;
    color: rgba(255, 255, 255, 0.801);
}
.project-tile p {
    color: white;
    text-decoration: none;
    margin: 0;
    font-weight: 600;
    font-family: 'Unbounded',sans-serif;
    /* font-style: ; */
    font-weight: normal;
}
.project-tile:hover {
    box-shadow: 1px 0.1px 40px #4d3177;
}
#codepen-box {
    padding-top: 1rem;
    padding-bottom: 2rem;
#codepen-link {
    background: #ffffff;
    padding: 0.5rem 1rem;
    border-radius: 5px;
    color: #201136;
    text-decoration: none;
}
#codepen-link:hover {
    background: #201136;
```

```
color: #ffffff;
    box-shadow: 1px 0.1px 10px #4d3177;
}
/* CONTACT */
#contact-section {
    width: 100%;
    text-align: center;
    padding: 2rem 1rem;
    background-color: rgb(0, 0, 0);
    background-image: linear-gradient(118deg, #2b1b42 0%, #4d3177 50%, #201136 100%);
    color: white;
}
#profile-list {
    display: flex;
    flex-direction: row;
    flex-wrap: wrap;
    justify-content: center;
    align-items: center;
    gap: 2rem;
    width: 100%;
    max-width: 1500px;
}
.profile-link img {
    width: 2rem;
    height: auto;
    max-width: 20vw;
    object-fit: cover;
}
```

<u>Output</u>



and converts it to w	ords.	9. Write a Javascript program which takes an input of a number from a text box and converts it to words.				

10. Write a program to implement Typescript classes with inheritance.				