Program 1. Create a Simple Admission Form for University admission.

Code:

```html
<!DOCTYPE html>
<html>
   <head>
      <title>Admission Form</title>
   </head>
      <meta charset="utf-8">
      <body bgcolor="#b3ffff" >
      <style>
         mark1{
               color: red;
            }
      </style>
         <h1 ><B>Admission Form</B><h1>
         <h4>Enter your admission information below</h4>
         <hr/>
         <!--Name-->
         <h3>Name  <mark1>*</mark1></h3>
         <p align="left">First Name   <input type="text" >
         <align="center"> Middle Name  <input type="text">
         <align="right"> Last Name  <input type="text"></p>
         <h3>Birth Date  <mark1>*</mark1></h3>
         <p align="left"><input type="Date" >
         <!--Gender-->
         <h3>Gender  <mark1>*</mark1></h3>
         <label><input type="checkbox" >Male</label><BR>
         <label><input type="checkbox" >Female</label><BR>
         <label><input type="checkbox" >Decline to Answer</label>
         <!--Phone Number-->
         <h3>Phone Number  <mark1>*</mark1></h3>
         <label><input type="text" ></label>
         <!--Email Address-->
         <h3>E-mail Address  <mark1>*</mark1></h3>
         <label><input type="text"></label>
         <!--10th AND 12TH Percentage-->
         <h3 align="left">10th
%          
                    
 
                   12th%
</h3>
         <label align="left"><input type="text"></label>
                   
         <label align="Middle"><input type="text"></label>
         <!--Address-->
```

```html
<h3>Address  <mark1>*</mark1></h3>
<textarea rows="3" cols="50"> </textarea>
<BR>
<label>Street Address<mark1>*</mark1></label>
<BR>
<BR>
<textarea rows="3" cols="50"> </textarea>
<BR>
<label>Street Address Line 2</label>
<BR>
<BR>
<label align="left"><input type="text"></label>
          
<label align="Middle"><input type="text"></label>
<BR>
<label align="left">City      
         
          
          
       </label>
<label align="right">State / Province</label>
<BR>
<BR>
<label align="left"><input type="text"></label>
<BR>
<label>Postal / Zip Code</label>
<BR>
<BR>
<!--Submit-->
<label align="left"><input type="submit"></label>
</body>
</html>
```

Output:

**Program 2. Write a simple HTML Script to make your Timetable.
Code:**

```html
<!DOCTYPE html>
<html>
  <head>
    <title>Time Table</title>
    <meta charset="utf-8">
    <body>
    <h3 align="center" style="padding: 0px; margin: 0px"> GRAPHIC ERA
DEEMED TO BE UNIVERSITY       Rev. 1.2</h3>
    <h3 align="center" style="padding: 0px; margin: 0px">ONLINE TIME TABLE OF
B. TECH. VIth SEMESTER – COMPUTER SCIENCE & ENGG. - F</h3>
    <h3 align="center" style="padding: 0px; margin: 0px">ACADEMIC YEAR 2021-
22</h3>
    <h3 style="padding: 0px; margin: 0px">Room
No:             
                   
          
                   
          
                   
          
                   
          
                   
    
            W.E.F:31st January 2022</h3>
    <style>
      table,th,td{
        border-collapse: collapse;
        border-color: rgb(0, 51, 0)
      }
      mark1{
        background-color: red;
        color: black;
      }
      mark2{
        background-color: rgb(204, 51, 255);
        color: black;
      }
      mark3{
        background-color: yellow;
        color: black;
      }
      mark4{
        background-color: rgb(0, 255, 255);
        color: black;
```

```
        }
        mark5{
            background-color: rgb(224, 224, 235);
            color: black;
        }
        mark6{
            background-color: rgb(0, 255, 0);
            color: black;
        }
    </style>

    <!--Table 1-->
    <table border=1 cellpadding="5" align="center" >
        <tr>
            <th></th>
            <th>9:00-9:55</th>
            <th>9:55-10:50</th>
            <th>11:10-12:05</th>
            <th>12:05-1:00</th>
            <th>1:00-1:55</th>
            <th>1:55-2:50</th>
            <th>3:10-4:05</th>
            <th>4:05-5:00</th>
        </tr>
        <tr>
            <td align="center" ><B>Mon</B></td>
            <td align="center" ><mark1><B>TCS-602</B></mark1></td>
            <td align="center"><mark2><B>TCS 693</mark2></B></td>
            <td align="center"><mark3><B>TCS-601</mark3></B></td>
            <td align="center"><mark4>TCS-691/<BR>
                TCS-651/<BR>
                TCS-619</mark4></td>
            <td align="center">Lunch</td>
            <td align="center"><mark5>XCS-601 (PDP)</mark5></td>
            <td colspan="2"><B>Career Excellence Classes (CEC)</B></td>
        </tr>
        <tr>
            <td align="center" ><B>Tue</B></td>
            <td align="center" ><mark1><B>TCS-602</B></mark1></td>
            <td align="center"><mark2><B>TCS 693</mark2></B></td>
            <td align="center"><mark3><B>TCS-601</mark3></B></td>
            <td align="center"><mark4>TCS-691/<BR>
                TCS-651/<BR>
                TCS-619</mark4></td>
            <td align="center">Lunch</td>
            <td align="center"><mark5>XCS-601 (QAR)</mark5></td>
            <td align="center"><mark6><B>TCS-604</mark6></B></td>
            <td align="center"><mark6><B>TCS-604</mark6></B></td>
```

```html
    </tr>
    <tr>
      <td align="center"><B>Wed</B></td>
      <td align="center" ><mark1><B>TCS-602</B></mark1></td>
      <td align="center"><mark2><B>TCS 693</mark2></B></td>
      <td align="center"><mark3><B>TCS-601</mark3></B></td>
      <td align="center"><mark4>TCS-691/<BR>
        TCS-651/<BR>
        TCS-619</mark4></td>
      <td align="center">Lunch</td>
      <td align="center"><B>Soft Skills (PDP)</B></td>
      <td align="center"><mark6><B>TCS-604</mark6></B></td>
      <td align="center"><mark6><B>TCS-604</mark6>
        <BR>(Discussion Class)</B></td>
    </tr>
    <tr>
      <td align="center"><B>Thu</B></td>
      <td align="center" ><mark1><B>TCS-602</mark1>
        <BR>(Discussion Class)</B></td>
      <td align="center"><mark2><B>TCS 693</mark2>
        <BR>(Discussion Class)</B></td></td>
      <td align="center"><mark3><B>TCS-601</mark3>
        <BR>(Discussion Class)</B></td></td>
      <td align="center"><mark4>TCS-691/<BR>
        TCS-651/<BR>
        TCS-619</mark4>
        <BR><B>(Discussion Class)</B></td>
      <td align="center">Lunch</td>
      <td align="center" colspan="3"><B>SWAYAM/Training/Extra-Curricular
Activities/LIB</B></td>
    </tr>
    <tr>
      <td align="center" ><B>Fri</B></td>
      <td align="center" colspan="2">Software Engineering Lab</td>
      <td align="center" colspan="2">Compiler Design Lab</td>
      <td align="center">Lunch</td>
      <td align="center"><B>Lib</B></td>
      <td align="center" colspan="2">Web Development Lab</td>
    </tr>
</table>

<h3 style="padding: 0px; margin: 0px"> </h3>

<!--Table 2-->
<table border=1 cellpadding="10" align="center" >
  <tr>
    <th>Subject Code</th>
    <th>Subject Name</th>
```

```html
        <th>Faculty</th>
    </tr>
    <tr>
        <td align="center" ><B>TCS-601</B></td>
        <td align="center" >Compiler Design</td>
        <td align="center">Dr. Devesh Pratap Singh</td>
    </tr>
    <tr>
        <td align="center" ><B>TCS-602</B></td>
        <td align="center" >Software Engineering</td>
        <td align="center">Ms. Neha Tripathi</td>
    </tr>
    <tr>
        <td align="center" ><B>TCS-604</B></td>
        <td align="center" >Computer Networks-I</td>
        <td align="center">Dr. Sumit Pundir</td>
    </tr>
    <tr>
        <td align="center" ><B>TCS-693</B></td>
        <td align="center" >Full Stack Web Development</td>
        <td align="center">Ms. Parul Madan</td>
    </tr>
    <tr>
        <td align="center" ><B>XCS-601</B></td>
        <td align="center" >Career Skills (QAR/PDP/ Soft Skills -PDP)</td>
        <td align="center">Mr. Saurabh Rawat/Mr. Okesh Chabbra/
        <BR>Mr.Gopal Krishna Dwivedi</td>
    </tr>
    <tr>
        <td align="center" colspan="3"><B>Elective</B></td>
    </tr>
    <tr>
        <td align="center" ><B>TCS-691</B></td>
        <td align="center" >Image Processing and Computer Vision</td>
        <td align="center">Dr. Manoj Diwakar & Dr. Vishan Gupta</td>
    </tr>
    <tr>
        <td align="center" ><B>TCS-651</B></td>
        <td align="center" >Devops on Cloud</td>
        <td align="center" >Dr. Vijay Singh</td>
    </tr>
    <tr>
        <td align="center" ><B>TCS-619</B></td>
        <td align="center" >Network and System Security</td>
        <td align="center">Dr. Mohammad Wazid & Dr. Priya Matta</td>
    </tr>
    <tr>
        <td align="center" colspan="3"><B>Lab</B></td>
```

```html
        </tr>
        <tr>
            <td align="center" ><B>PCS-601</B></td>
            <td align="center" >Compiler Design Lab</td>
            <td align="center">Mr. Ankit Tomar</td>
        </tr>
        <tr>
            <td align="center" ><B>PCS 602</B></td>
            <td align="center" >Software Engineering Lab</td>
            <td align="center" >Dr. Jyoti Agarwalh</td>
        </tr>
        <tr>
            <td align="center" ><B>PCS-693</B></td>
            <td align="center" >Web Development Lab</td>
            <td align="center">Ms. Parul Madan & Dr. Manoj Diwakar</td>
        </tr>
    </table>

    </body>
  </head>
</html>
```

Output:

Program 3. WAP in HTML to implement a frame.

Code:

Venus.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>
       Venus
    </title>
    <link rel="stylesheet" href="Question 1 css.css"/>
  </head>

  <body>
    <div classname="Venus">
      <h1 align="center">Venus</h1>
      <div>
        <img src="\Venus.jpg">
      </div>
      <p>
          Venus is the second planet from the Sun. It is named after the Roman
goddess of love and beauty.
          As the brightest natural object in Earth's night sky after the Moon, Venus
can cast shadows and
          can be visible to the naked eye in broad daylight. Venus lies within Earth's
orbit, and so never
          appears to venture far from the Sun. Most of the time, Venus is either a
morning star or an evening
          star, when it rises in the east a little while before dawn or sets in the west
just after dusk,
          respectively. Venus orbits the Sun every 224.7 Earth days. It has a
synodic day length of 117 Earth
          days and a sidereal rotation period of 243 Earth days. As a consequence,
it takes longer to rotate
          about its axis than any other planet in the Solar System, and does so in
the opposite direction to all
           but Uranus. This means the Sun rises in the west and sets in the east.
Venus does not have any moons,
            a distinction it shares only with Mercury among the planets in the Solar
System.
      </p>
      <p>
          Venus is a terrestrial planet and is sometimes called Earth's "sister planet"
because of their similar size,
          mass, proximity to the Sun, and bulk composition. It is radically different
from Earth in other respects.
```

It has the densest atmosphere of the four terrestrial planets, consisting of more than 96% carbon dioxide.

The atmospheric pressure at the planet's surface is about 92 times the sea level pressure of Earth, or roughly

the pressure at 900 m (3,000 ft) underwater on Earth. Even though Mercury is closer to the Sun, Venus has the

hottest surface of any planet in the Solar System, with a mean temperature of 737 K (464 °C; 867 °F). Venus is

shrouded by an opaque layer of highly reflective clouds of sulfuric acid, preventing its surface from being seen

from space in light. It may have had water oceans in the past, but these would have vaporized as the temperature

rose under a runaway greenhouse effect. The water has probably photodissociated, and the free hydrogen has been

swept into interplanetary space by the solar wind because of the lack of a planetary magnetic field.
</p>
<p>

As one of the brightest objects in the sky, Venus has been a major fixture in human culture for as long as records

have existed. It has been made sacred to gods of many cultures, and has been a prime inspiration for writers and poets

as the "morning star" and "evening star". Venus was the first planet to have its motions plotted across the sky, as

early as the second millennium BC.
</p>
<p>

Its proximity to Earth has made Venus a prime target for early interplanetary exploration. It was the first planet beyond

Earth visited by a spacecraft (Venera 1 in 1961), and the first to be successfully landed on (by Venera 7 in 1970). Venusian

thick clouds render observation of its surface impossible in visible spectrum, and the first detailed maps did not emerge

until the arrival of the Magellan orbiter in 1991. Plans have been proposed for rovers or more complex missions, but they are

hindered by Venus's hostile surface conditions. The possibility of life on Venus has long been a topic of speculation, and in

recent years has received active research.
</p>
<h1 style="color:black" font-style="bold">Physical characteristics</h1>
<p>

Venus is one of the four terrestrial planets in the Solar System, meaning that it is a rocky body like Earth. It is similar to

Earth in size and mass, and is often described as Earth's "sister" or "twin". The diameter of Venus is 12,103.6 km (7,520.8 mi)—only

638.4 km (396.7 mi) less than Earth's—and its mass is 81.5% of Earth's. Conditions on the Venusian surface differ radically from

those on Earth because its dense atmosphere is 96.5% carbon dioxide, with most of the remaining 3.5% being nitrogen. The surface
pressure is 9.3 megapascals (93 bar) and the average surface temperature is 737 K (464 °C; 867 °F), above the critical points of
both major constituents and making the surface atmosphere a supercritical fluid.

```
        </p>
        <p>
```

Venus has an extremely dense atmosphere composed of 96.5% carbon dioxide, 3.5% nitrogen—both exist as supercritical fluids at the
planet's surface—and traces of other gases including sulfur dioxide. The mass of its atmosphere is 92 times that of Earth's, whereas
the pressure at its surface is about 93 times that at Earth's—a pressure equivalent to that at a depth of nearly 1 km (5⁄8 mi) under
Earth's oceans. The density at the surface is 65 kg/m3, 6.5% that of water or 50 times as dense as Earth's atmosphere at 293 K (20 °C; 68 °F)
at sea level. The CO2-rich atmosphere generates the strongest greenhouse effect in the Solar System, creating surface temperatures of at least
735 K (462 °C; 864 °F).[20][31] This makes the Venusian surface hotter than Mercury's, which has a minimum surface temperature of 53 K
(−220 °C; −364 °F) and maximum surface temperature of 700 K (427 °C; 801 °F), even though Venus is nearly twice Mercury's distance from the Sun
and thus receives only 25% of Mercury's solar irradiance. Because of its runaway greenhouse effect, Venus been identified by scientists such as
Carl Sagan as a warning and research object linked to climate change on Earth.

```
        </p>
    </div>
  </body>
</html>
```

Earth.html

```html
<!DOCTYPE html>
<html>
  <head>
    <title>
      Earth
    </title>
    <link rel="stylesheet" href="Question 1 css.css"/>
  </head>

  <body>
    <div classname="Earth">
      <h1 align="center">Earth</h1>
      <div>
        <img src="Earth.png">
      </div>
```

<p>
Earth is the third planet from the Sun and the only astronomical object known to harbor life. While large amounts of water
can be found throughout the Solar System, only Earth sustains liquid surface water. About 71% of Earth's surface is made up
of the ocean, dwarfing Earth's polar ice, lakes and rivers. The remaining 29% of Earth's surface is land, consisting of continents
and islands. Earth's surface layer is formed of several slowly moving tectonic plates, interacting to produce mountain ranges,
volcanoes and earthquakes. Earth's liquid outer core generates the magnetic field that shapes Earth's magnetosphere, deflecting
destructive solar winds.
</p>
<p>
Earth's atmosphere consists mostly of nitrogen and oxygen. More solar energy is received by tropical regions than polar regions and
is redistributed by atmospheric and ocean circulation. Water vapor is widely present in the atmosphere and forms clouds that cover most
of the planet. Greenhouse gases in the atmosphere like carbon dioxide (CO2) trap a part of the energy from the Sun close to the surface.
A region's climate is governed by latitude, but also by elevation and proximity to moderating oceans. Severe weather, such as tropical
cyclones, thunderstorms, and heatwaves, occurs in most areas and greatly impacts life.
</p>
<p>
Earth is an ellipsoid with a circumference of about 40,000 km. It is the densest planet in the Solar System. Of the four rocky planets,
it is the largest and most massive. Earth is about eight light minutes away from the Sun and orbits it, taking a year (about 365.25 days)
to complete one revolution. Earth rotates around its own axis in a day. Earth's axis of rotation is tilted with respect to its orbital plane
with the Sun, producing seasons. Earth is orbited by one permanent natural satellite, the Moon, which orbits Earth at 380,000 km (1.3 light seconds)
and is roughly a quarter as wide as Earth. The Moon always faces the Earth with the same side through tidal locking and causes tides, stabilizes Earth's
axis and gradually slows its rotation.
</p>
<p>
Earth formed over 4.5 billion years ago. During the first billion years of Earth's history, the ocean formed and then life developed within it.
Life spread globally and began to affect Earth's atmosphere and surface, leading to Earth's Great Oxidation Event two billion years ago. Humans emerged
300,000 years ago, and have reached a population of almost 8 billion today. Humans depend on Earth's biosphere and natural resources for their survival,
but have increasingly impacted Earth's environment. Today, humanity's impact on Earth's climate, soils, waters and ecosystems is unsustainable, threatening

```
            people's lives and causing widespread extinction of other life.
        </p>

    </div>
  </body>
</html>
```

Jupiter.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>
      Jupiter
    </title>
    <link rel="stylesheet" href="Question 1 css.css"/>
  </head>

  <body>
    <div classname="jupiter">
      <h1 align="center">Jupiter</h1>
      <div>
        <img src="Jupiter.png " alt="jupiter" >
      </div>
      <p>
          Jupiter is the fifth planet from the Sun and the largest in the Solar System.
It is a gas giant with a mass more than two and a half times that
          of all the other planets in the Solar System combined, but slightly less than
one-thousandth the mass of the Sun. Jupiter is the third brightest
          natural object in the Earth's night sky after the Moon and Venus. People
have been observing it since prehistoric times; it was named after the
          Roman god Jupiter, the king of the gods, because of its observed size.
      </p>
      <p>
          Jupiter is primarily composed of hydrogen, but helium constitutes one-
quarter of its mass and one-tenth of its volume. It likely has a rocky core
          of heavier elements, but, like the other giant planets, Jupiter lacks a well-
defined solid surface. The ongoing contraction of its interior
          generates heat greater than the amount received from the Sun. Because
of its rapid rotation, the planet's shape is an oblate spheroid; it has a
          slight but noticeable bulge around the equator. The outer atmosphere is
visibly segregated into several bands at different latitudes, with turbulence
          and storms along their interacting boundaries. A prominent result of this is
the Great Red Spot, a giant storm known to have existed since at least
          the 17th century when telescopes first saw it.
      </p>
      <p>
```

Surrounding Jupiter is a faint planetary ring system and a powerful magnetosphere. Jupiter's magnetic tail is nearly 800 million km (5.3 AU; 500 million mi)
long, covering the entire distance to Saturn's orbit. Jupiter has 80 known moons and possibly many more, including the four large Galilean moons discovered
by Galileo Galilei in 1610: Io, Europa, Ganymede, and Callisto. Io and Europa are about the size of Earth's Moon; Callisto is almost the size of the planet
Mercury, and Ganymede is even larger.
</p>
<p>
Pioneer 10 was the first spacecraft to visit Jupiter, making its closest approach to the planet in December 1973. Jupiter has since been explored on several
occasions by robotic spacecraft, beginning with the Pioneer and Voyager flyby missions from 1973 to 1979, and later by the Galileo orbiter, which arrived at
Jupiter in 1995. In 2007, the New Horizons visited Jupiter using its gravity to increase its speed, bending its trajectory en route to Pluto. The latest
probe to visit the planet, Juno, entered orbit around Jupiter in July 2016. Future targets for exploration in the Jupiter system include the probable
ice-covered liquid ocean of Europa.
</p>
<h1 style="color:black" font-style="bold">Formation and migration</h1>
<p>
Jupiter is most likely the oldest planet in the Solar System. Current models of Solar System formation suggest that Jupiter formed at or beyond the snow line;
a distance from the early Sun where the temperature is sufficiently cold for volatiles such as water to condense into solids. It first assembled a large solid
core before accumulating its gaseous atmosphere. As a consequence, the core must have formed before the solar nebula began to dissipate after 10 million years.
Formation models suggest Jupiter grew to 20 times the mass of the Earth in under a million years. The orbiting mass created a gap in the disk, thereafter slowly
increasing to 50 Earth masses in 3–4 million years.
</p>
<p>
According to the "grand tack hypothesis", Jupiter would have begun to form at a distance of roughly 3.5 AU (520 million km; 330 million mi). As the young planet
accreted mass, interaction with the gas disk orbiting the Sun and orbital resonances with Saturn caused it to migrate inward. This would have upset the
orbits of what are believed to be super-Earths orbiting closer to the Sun, causing them to collide destructively. Saturn would later have begun to migrate inwards too,
much faster than Jupiter, leading to the two planets becoming locked in a 3:2 mean motion resonance at approximately 1.5 AU (220 million km; 140 million mi).

This, in turn, would have changed the direction of migration, causing them to migrate away from the Sun and out of the inner system to their current locations.These migrations would have occurred over an 800,000-year time period, with all of this happening over a time period of up to 6 million years after Jupiter began to form (3 million being a more likely figure). This departure would have allowed the formation of the inner planets from the rubble, including Earth.
    </p>
    <p>
However, the formation timescales of terrestrial planets resulting from the grand tack hypothesis appear inconsistent with the measured terrestrial composition. Moreover, the likelihood that the outward migration actually occurred in the solar nebula is very low. In fact, some models predict the formation of Jupiter's analogues whose properties are close to those of the planet at the current epoch.
    </p>
    <p>
Other models have Jupiter forming at distances much further out, such as 18 AU (2.7 billion km; 1.7 billion mi). In fact, based on Jupiter's composition, researchers have made the case for an initial formation outside the molecular nitrogen (N2) snowline, which is estimated at 20–30 AU (3.0–4.5 billion km; 1.9–2.8 billion mi),and possibly even outside the argon snowline, which may be as far as 40 AU (6.0 billion km; 3.7 billion mi). Having formed at one of these extreme distances, Jupiter would then have migrated inwards to its current location. This inward migration would have occurred over a roughly 700,000-year time period, during an epoch approximately 2–3 million years after the planet began to form. Saturn, Uranus and Neptune would have formed even further out than Jupiter, and Saturn would also have migrated inwards.
    </p>
    </div>
    </div>
  </body>

</html>

main.html

<!DOCTYPE html>
<html>
  <body bgcolor = "#b5dcb3">
    <h3>This is main page and content from any link will be displayed here.</h3>
    <p>So now click any link and see the result.</p>

```
      </body>
</html>
```

menu.html

```
<!DOCTYPE html>
<html>
   <head>
     <title>
        Menu Page
     </title>
     <style>
        h1{
           color:red;
           text-align: center;
        }
     </style>
   </head>
   <body bgcolor="bisque">
     <h1 >Selected Planets</h1>
     <p>Read essential details about the following planets: </p>
     <ul>
        <li><a href="C:\Users\Shreyansh\Desktop\PCS 693 Lab work\Assignment
2\Venus.html" target="main_page">Venus</a></li>
        <br />

        <li><a href="C:\Users\Shreyansh\Desktop\PCS 693 Lab work\Assignment
2\Earth.html" target="main_page">Earth</a></li>
        <br />

        <li><a href="C:\Users\Shreyansh\Desktop\PCS 693 Lab work\Assignment
2\Jupiter.html" target="main_page">Jupiter</a></li>
        <br />
     </ul>
   </body>
</html>
```

Frame.html

```
<!DOCTYPE html>
<html>
   <head>
     <title>
        Implementation of frame
     </title>
   </head>
     <frameset cols="30%,70%" border="10">
```

```
        <frame name="menu_page" src="C:\Users\Shreyansh\Desktop\PCS 693 Lab
work\Assignment 2\menu.html" />
        <frame name="main_page" src="C:\Users\Shreyansh\Desktop\PCS 693 Lab
work\Assignment 2\main.html" />


        <noframes>
            <body> Your browser does not support frames.</body>
        </noframes>
    </frameset>
</html>
```

Output:
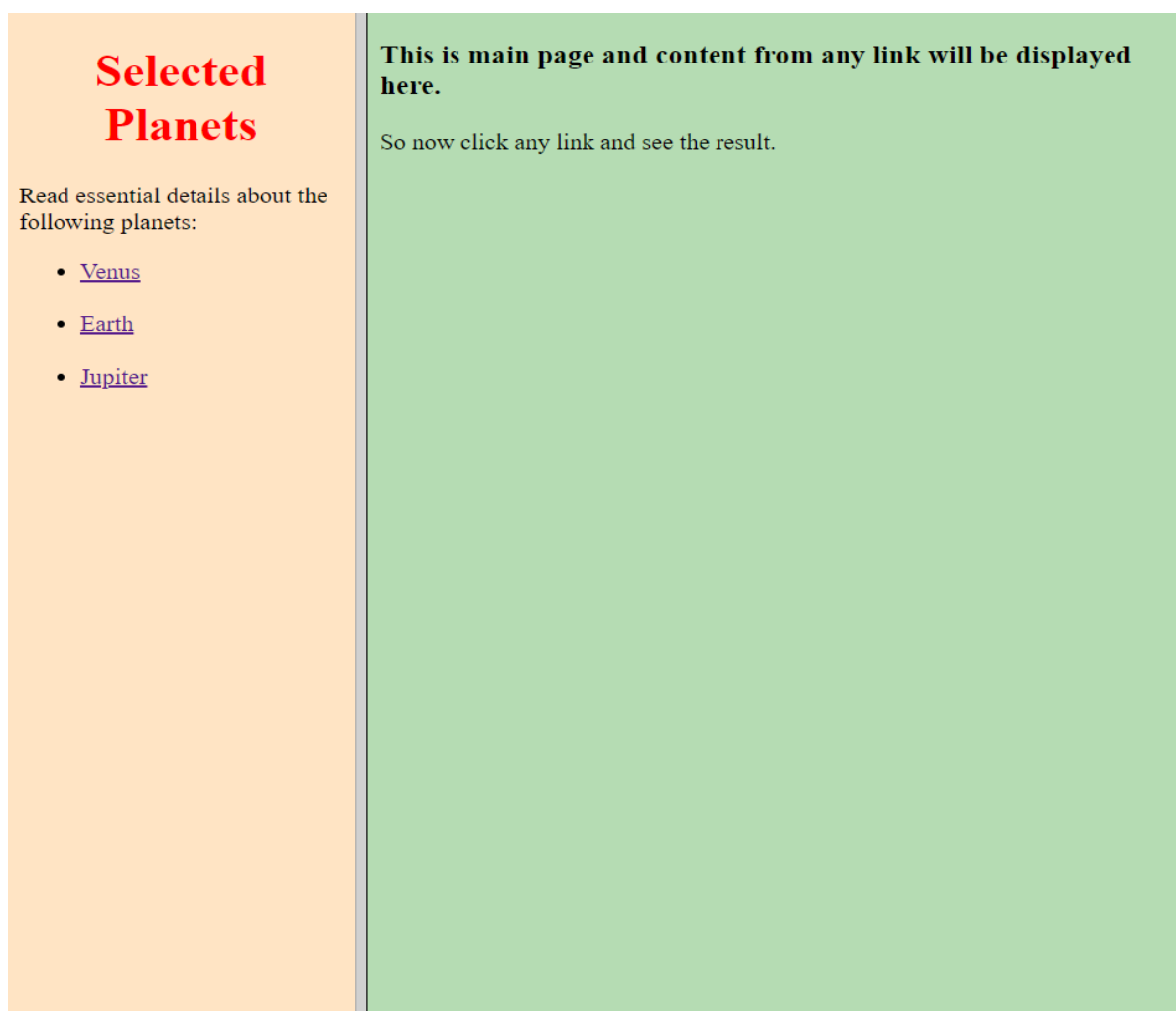
Selected Planets

Read essential details about the following planets:

- Venus
- Earth
- Jupiter

Venus

Venus is the second planet from the Sun. It is named after the Roman goddess of love and beauty. As the brightest natural object in Earth's night sky after the Moon, Venus can cast shadows and can be visible to the naked eye in broad daylight. Venus lies within Earth's orbit, and so never appears to venture far from the Sun. Most of the time, Venus is either a morning star or an evening star, when it rises in the east a little while before dawn or sets in the west just after dusk, respectively. Venus orbits the Sun every 224.7 Earth days. It has a synodic day length of 117 Earth days and a sidereal rotation period of 243 Earth days. As a consequence, it takes longer to rotate about its axis than any other planet in the Solar System, and does so in the opposite direction to all but Uranus. This means the Sun rises in the west and sets in the east. Venus does not have any moons, a distinction it shares only with Mercury among the planets in the Solar System.

Venus is a terrestrial planet and is sometimes called Earth's "sister planet" because of their similar size, mass, proximity to the Sun, and bulk composition. It is radically different from Earth in other respects. It has the densest atmosphere of the four terrestrial planets, consisting of more than 96% carbon dioxide. The atmospheric pressure at the planet's surface is about 92 times the sea level pressure of Earth, or roughly the pressure at 900 m (3,000 ft) underwater on Earth. Even though Mercury is closer to the Sun, Venus has the hottest surface of any planet in the Solar System, with a mean temperature of 737 K (464 °C; 867 °F). Venus is shrouded by an opaque layer of highly reflective clouds of sulfuric acid, preventing its surface from being seen from space in light. It may have had water oceans in the past, but these would have vaporized as the temperature rose under a runaway greenhouse effect. The water has probably photodissociated, and the free hydrogen has been swept into interplanetary space by the solar wind because of the lack of a planetary magnetic field.

As one of the brightest objects in the sky, Venus has been a major fixture in human culture for as long as records have existed. It has been made sacred to gods of many cultures, and has been a prime inspiration for writers and poets as the "morning star" and "evening star". Venus was the first planet to have its motions plotted across the

---

Selected Planets

Read essential details about the following planets:

- Venus
- Earth
- Jupiter

Earth

Earth is the third planet from the Sun and the only astronomical object known to harbor life. While large amounts of water can be found throughout the Solar System, only Earth sustains liquid surface water. About 71% of Earth's surface is made up of the ocean, dwarfing Earth's polar ice, lakes and rivers. The remaining 29% of Earth's surface is land, consisting of continents and islands. Earth's surface layer is formed of several slowly moving tectonic plates, interacting to produce mountain ranges, volcanoes and earthquakes. Earth's liquid outer core generates the magnetic field that shapes Earth's magnetosphere, deflecting destructive solar winds.

Earth's atmosphere consists mostly of nitrogen and oxygen. More solar energy is received by tropical regions than polar regions and is redistributed by atmospheric and ocean circulation. Water vapor is widely present in the atmosphere and forms clouds that cover most of the planet. Greenhouse gases in the atmosphere like carbon dioxide (CO2) trap a part of the energy from the Sun close to the surface. A region's climate is governed by latitude, but also by elevation and proximity to moderating oceans. Severe weather, such as tropical cyclones, thunderstorms, and heatwaves, occurs in most areas and greatly impacts life.

Earth is an ellipsoid with a circumference of about 40,000 km. It is the densest planet in the Solar System. Of the four rocky planets, it is the largest and most massive. Earth is about eight light minutes away from the Sun and orbits it, taking a year (about 365.25 days) to complete one revolution. Earth rotates around its own axis in a day. Earth's axis of rotation is tilted with respect to its orbital plane with the Sun, producing seasons. Earth is orbited by one permanent natural satellite, the Moon, which orbits Earth at 380,000 km (1.3 light seconds) and is roughly a quarter as wide as Earth. The Moon always faces the Earth with the same side through tidal locking and causes tides, stabilizes Earth's axis and gradually slows its rotation.

Earth formed over 4.5 billion years ago. During the first billion years of Earth's history, the ocean formed and then life developed within it. Life spread globally and began to affect Earth's atmosphere and surface, leading to

Program 4. WAP in HTML to implement a table.

Code:

```html
<!DOCTYPE html>
<html>
    <head>
        <title>
            Table
        </title>
        <style>
            table{
                border-collapse: collapse;
                text-align: center;

            }

            th, td{
                border: 1px solid black;
                padding: 4px;
                text-align: center;
            }
        </style>
    </head>
    <body>
        <table border="1" cellpadding="5" align="center">
```

```
<tr>
    <th rowspan="3">Day</th>
    <th colspan="3">Seminar</th>
</tr>
<tr>
    <th colspan="2">Schedule</th>
    <th rowspan="2">Topic</th>
</tr>
<tr>
    <th>Begin</th>
    <th>End</th>
</tr>
<tr>
    <td rowspan="2">Monday</td>
    <td rowspan="2" bgcolor="#FAFAD2">8:00 a.m.</td>
    <td rowspan="2" bgcolor="#E0B0FF">5:00 p.m.</td>
    <td>Introduction to XML</td>
</tr>
<tr>
    <td>Validity: DTD and Relax NG</td>
</tr>
<tr>
    <td rowspan="3">Tuesday</td>
    <td bgcolor="#FAFAD2">8:00 a.m.</td>
    <td bgcolor="#FAFAD2">11:00 a.m.</td>
    <td rowspan="1">XPath</td>
</tr>
<tr>
    <td bgcolor="#FAFAD2">11:00 a.m.</td>
    <td bgcolor="#98FB98">2:00 p.m.</td>
    <td rowspan="2"><center>XSL Transformations</center></td>
</tr>
<tr>
    <td bgcolor="#98FB98">2:00 p.m.</td>
    <td bgcolor="#E0B0FF">5:00 p.m.</td>

</tr>
<tr>
    <td>Wednesday</td>
    <td bgcolor="#FAFAD2">8:00 a.m.</td>
    <td bgcolor="#98FB98">12:00 p.m.</td>
    <td>XSL Formatting Objects</td>
</tr>
</table>

</body>
</html>
```

Output:

Day	Seminar		
	Schedule		Topic
	Begin	End	
Monday	8:00 a.m.	5:00 p.m.	Introduction to XML
			Validity: DTD and Relax NG
Tuesday	8:00 a.m.	11:00 a.m.	XPath
	11:00 a.m.	2:00 p.m.	XSL Transformations
	2:00 p.m.	5:00 p.m.	
Wednesday	8:00 a.m.	12:00 p.m.	XSL Formatting Objects

Program 5. Write a JavaScript function to check whether an `input` is an integer or not.

Test Data: 'ABCD'

false

[17, 52, 94, 60]

True

Code:

Program5.html

```html
<!DOCTYPE html>
<html>
<head>
    <title>Document</title>
</head>
<body>
    <input type="text" id="text1" placeholder="Enter String"/>
    <button id="button1" onclick="clicked()">Submit</button>
    <script src="Program5.js">
    </script>
</body>
</html>
```

Program5.js

```javascript
const arr=[17,52,94,60]
x=arr.every(isInt);
function isInt(value){
    return Number.isInteger(value);
}
y=isInt('ABCD');
console.log('ABCD');
console.log(y);
console.log(arr);
console.log(x);
```

Output:

```
ABCD                                              Program5.js:7
false                                             Program5.js:8
▶ (4) [17, 52, 94, 60]                            Program5.js:9
true                                              Program5.js:10
```

Program 6: write a java script function to move a circle from top to bottom with 50 px;

circle attributes:

background color: blue

border color: red

Code:

Program6.html

```html
<!DOCTYPE html>
<html>
<head>
    <title>Move Circle</title>
    <link rel="stylesheet" href="Program6.css">
</head>
<body>
    <div class="circle">
        click to move
    </div>
    <script src="Program6.js"></script>
</body>
</html>
```

Program6.css

```css
.circle{
    border: 1px solid red;
    border-color: red;
    background-color: blue;
    height: 200px;
    width: 200px;
    border-radius: 100px;
    position: absolute;
    text-align: center;
    line-height: 100px;
}
```

Program6.js

```javascript
const circle1=document.querySelector(".circle");
    inc=0;
    circle1.addEventListener('click', ()=>{
        inc=inc+50;
        circle1.style.top=inc+"px";
    })
```

Output:

click to move

click to move
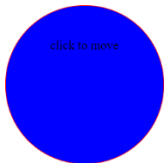
Program 7: Write a JavaScript program to draw the following diagram [use moveto() function].

Expected Output:

Code:

Program7.html

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

<head>
    <title>Draw</title>
</head>

<body onload="draw();">
    <canvas id="canvas" width="250" height="250"> hello</canvas>
    <script src="Program7.js"></script>
</body>

</html>
```

Program7.js

```javascript
function draw() {
    var canvas = document.getElementById('canvas');
    if (canvas.getContext) {
        var context = canvas.getContext('2d');
        context.beginPath();
        //Outer Circle
        context.arc(75, 75, 50, 0, Math.PI * 2, true);
        context.moveTo(110, 75);
        //Mouth
        context.arc(75, 75, 35, 0, Math.PI, false);
        //Left and Right Eye
        context.moveTo(55, 65);
        context.arc(60, 65, 5, 0, Math.PI * 2, true);
        context.arc(90, 65, 5, 0, Math.PI * 2, true);
        context.stroke();
    }
}
```

Output:
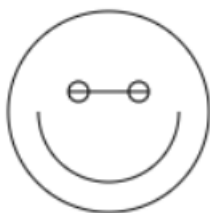
Program 8: Write a JavaScript program to calculate the volume of cube using form.

Code:

Program8.html

```html
<!DOCTYPE html>
<html>
<head>
    <title>Admission Form</title>
</head>
<meta charset="utf-8">

<link rel="stylesheet" href="\Program8.css" />
<style>
    body {
        background-color: cyan;
    }

    mark1 {
        color: red;
    }
</style>

<body>
    <h1><B>Volume of Cube</B>
        <h1>
            <h4>Enter side of the cube</h4>
            <hr />
            <!--Name-->
            <h3>Side<mark1>*</mark1>   <input type="text" id="vol1">
</h3>
            <!-- Button -->
            <div>
                <Button id="vol" onclick="clicked()">Calculate Volume</Button>
            </div>
            <script src="Program8.js"></script>

</body>

</html>
```
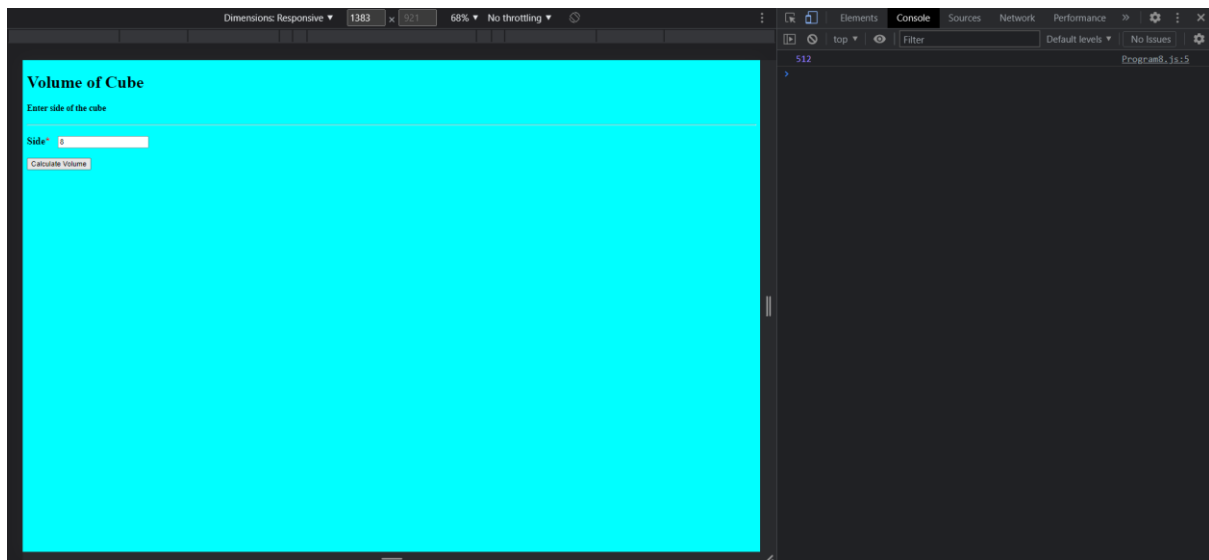
Program8.js

```javascript
function clicked()
{
const vol = document.querySelector('#vol1').value;
side=vol*vol*vol;
console.log(side);
}
```

Output:

Program 9: Write a JavaScript for loop that will iterate from 0 to 100. For each iteration, it will check if the current number is perfect square or not, and display a message to the screen/console.
Code:

```html
<!DOCTYPE html>
<html >
<head>
   <title>Document</title>
</head>
<body>
   <script>
      for(i=0;i<=100;i++){
         x=Math.sqrt(i);
         if(Number.isInteger(x))
            console.log(i+" is a perfect square");
      }
   </script>
</body>
</html>
```

Output:

```
0 is a perfect square                                    Progrm9.html:11
1 is a perfect square                                    Progrm9.html:11
4 is a perfect square                                    Progrm9.html:11
9 is a perfect square                                    Progrm9.html:11
16 is a perfect square                                   Progrm9.html:11
25 is a perfect square                                   Progrm9.html:11
36 is a perfect square                                   Progrm9.html:11
49 is a perfect square                                   Progrm9.html:11
64 is a perfect square                                   Progrm9.html:11
81 is a perfect square                                   Progrm9.html:11
100 is a perfect square                                  Progrm9.html:11
Live reload enabled.                                     Progrm9.html:42
```

Program 10: Write a JavaScript function to check whether a given value is a valid password & mail-id or not.

Code:
Program10.html

```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>Valid Email and Password</title>
</head>

<body>
    <input id="email" placeholder="Enter your Email" required /></br>
    <input id="password" type="password" placeholder="Enter the password"
required /></br>
    <h2 id="isValid"></h2>
    <button id="submitButton">Submit</button>

    <script src="Program10.js"></script>
</body>

</html>
```

Program10.js

```javascript
let text = document.querySelector("#isValid");

function check(email, password) {
    let flag1 = 0, flag2 = 0;

    for (let i = 0; i < email.length; i++) {
        if (email[i] == '@') {
            for (let j = i + 1; j < email.length; j++) {
                if (email[j] == '.' && j != email.length - 1) {
                    flag1 = 1;
                }
            }
        }
    }

    if (password.length >= 8) {
        flag2 = 1;
    }

    return flag1 && flag2;
}

document.querySelector("#submitButton").addEventListener("click", function
(event) {
    let email = document.querySelector("#email").value;
    let password = document.querySelector("#password").value;

    if (check(email, password)) {
        text.innerText = "Valid Email and Password";
    }
    else {
        text.innerText = "Invalid EMail and Password";
    }

    event.preventDefault();
});
```

Output:

shreyansh.nanda ⊚

•••• ⊚

Invalid EMail and Password

Submit

shreyansh@gmail.com ⊚

••••••• ⊚

Valid Email and Password

Submit