JavaScript Exercises

1. Write a javascript program to show date and time in this format: 2020-08-20 10:12:30

```html
<> unit11 q.no.1.html > ☉ html > ☉ body > ☉ script
1    <html>
2    <head>
3        <title>Show date and time </title>
4    </head>
5    <body>
6        <script>
7        // Get current date and time
8            var currentDate = new Date();
9            var year = currentDate.getFullYear();    // Format date components
10           var month = ('0' + (currentDate.getMonth() + 1)).slice(-2); // Adding 1 as months are 0-based
11           var day = ('0' + currentDate.getDate()).slice(-2);
12           var hours = ('0' + currentDate.getHours()).slice(-2);
13           var minutes = ('0' + currentDate.getMinutes()).slice(-2);
14           var seconds = ('0' + currentDate.getSeconds()).slice(-2);
15
16       var formattedDateTime = year + '-' + month + '-' + day + ' ' + hours + ':' + minutes + ':' + seconds;    // Date and time string
17       document.write(formattedDateTime);  //Display date and time string
18
19       </script>
20   </body>
21   </html>
```

Output:

2024-04-03 01:16:03

2. WAP in show javascript events for the following:

a. Change the Text on <H1> when you click on that <H1> element. (Hint: use innerHTML

property to set your text)

b. When you click on the button, display date and time.

```
<> unit11 q.no.2.html > ...
 1    <html>
 2    <head>
 3        <title> JavaScript Events </title>
 4    </head>
 5
 6    <body>
 7    <h1 id="myH1" onclick="changeText()">Click me!</h1>
 8    <button onclick="displayDateTime()">Date and Time</button>
 9    <p id="dateTime"></p>
10
11    <script>
12    function changeText() {
13        document.getElementById("myH1").innerHTML = "You clicked me!";}
14    function displayDateTime() {
15        var date = new Date();
16        document.getElementById("dateTime").innerHTML = date;}
17    </script>
18
19    </body>
20    </html>
21
```

Output:

Click me!

Date and Time

Wed Apr 03 2024 01:28:59 GMT+0545 (Nepal Time)

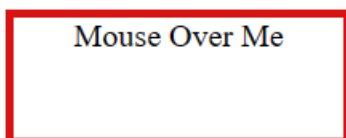3. Write a Javascript program to create function and call them in mouse events:

a. Create mOver() function to show Thank You Text in the innerHTML of div element, and call this function on onmouseover event

b. Create mOut() function to show Mouse Over Me Text in the innerHTML of div element, and call this function on onmouseout event.

```
<> unit11 q.no.3.html > ...
 1   <html>
 2       <head>
 3           <title>Mouse over and out</title>
 4       </head>
 5
 6   <body>
 7   <div id="myDiv" onmouseover="mOver()" onmouseout="mOut()"
 8       style="width:165px;height:60px;border:4px solid
 9          ▇rgb(219, 18, 18);text-align:center">Mouse Over Me</div>
10   <script>
11
12   function mOver() {
13       document.getElementById("myDiv").innerHTML = "Thank You";}
14
15   function mOut() {
16       document.getElementById("myDiv").innerHTML = "Mouse Over Me";}
17   </script>
18
19   </body>
20   </html>
21   |
```

Output:

```
Mouse Over Me
```

When I move cursor over the text it displays:

```
Thank You
```

4. Write a JavaScript program to change the background color of a paragraph.

```
<> unit11 q.no.4.html > </> html
1    <html>
2    <head>
3        <title>paragraph color change. </title>
4    </head>
5    <body>
6        <p id="paragraph">Hello, i am Apekshya, currently studying javascript!</p>
7        <button onclick="document.getElementById('paragraph').style.backgroundColor='red'">Change Color</button>
8    </body>
9    </html>
```

Output:

Hello, i am Apekshya, currently studying javascript!

Change Color

After I click to 'change color' button:

Hello, i am Apekshya, currently studying javascript!

Change Color

5. Write a JavaScript program to validate following.

a. Check whether a given value type entered in text box is NaN or not.

b. Check whether two inputs entered in password and confirm password text fields are same or not.

```html
1   <html>
2   <head>
3       <title>Inputs entered in password and confirm password text fields are same or not.</title>
4   <script>
5   function checkNaN() {
6       var value = document.getElementById('inputBox').value;
7       if (isNaN(value)) {
8           alert('The entered value is NaN.');
9       } else {
10          alert('The entered value is a number.');
11      }
12  }
13
14  function checkPasswords() {
15      var password = document.getElementById('password').value;
16      var confirmPassword = document.getElementById('confirmPassword').value;
17      if (password === confirmPassword) {
18          alert('Passwords match.');
19      } else {
20          alert('Passwords do not match.');
21      }}
22  </script>
23  </head>
24  <body>
25
26  <!-- for NaN -->
27  <h3>NaN or not</h3>
28  <input type="text" id="inputBox" placeholder="Enter a value">
29  <button onclick="checkNaN()">Check NaN</button>
30
31  <!--  for matching passwords -->
32  <h3>Passwords same or not</h3>
33  <label for="password">Password:</label>
34  <input type="password" id="password">
35  <label for="confirmPassword">Confirm Password:</label>
36  <input type="password" id="confirmPassword">
37  <button onclick="checkPasswords()">Check Passwords</button>
38
39  </body>
40  </html>
41
```

Output:

NaN or not

| 5 | | Check NaN |

This page says

The entered value is a number.

OK

Passwords same or not

Password: [••••••••] Confirm Password: [••••••••] Check Passwords

And

NaN or not

[5] [Check NaN]

Passwords same or not

Password: [••••••••] Confirm Password: [••••••••] [Check Passwords]

This page says

Passwords match.

[OK]