Q.1 Create a user defined module named Math with four functions Addition, Subtraction, Multiplication, division and exports.

```
const math = require('math');
var a = 20, b = 20;
console.log("Addition: -" + math.add(a, b));
console.log("Subtraction: -" + math.sub(a, b));
console.log("Multiplication: -" + math.mul(a, b));
console.log("Division: -" + math.div(a, b));
```

Q.2 Display hostname and platform details of current system on the console.

```
const os = require('os');
console.log('Platform of OS:', os.platform());
console.log('Hostname of OS:', os.hostname());
```

Q.3 Create a Node js script file that display Hello text in red color and welcome to node js text in rainbow colors on the console.

```
var c = require("colors");
console.log("hello".red);
console.log("welcome to node js".rainbow);
```

Q.4 Create a Node js Script that displays a message "Welcome to Node js Lecture" through a loop with delay in between iterations using setTimeOut()?

```
var message = "Welcome to Node.js Lecture";
var iterations = 5;

function displayMessage(i)
{
  if (i < iterations)
  {
    console.log(message);
  }
  if (i < iterations - 1)
    {
    setTimeout(() => displayMessage(i + 1), 1000);
    }
}
```

```
displayMessage(0);
```

Q.5 Write Node script file to display Current date and time by using user defined date module.

```
var datetime = new Date();
console.log(datetime);
```

Q.6 Display Directory name, file extension and file name on command prompt using node.

```
const path = require('path');
const fs = require('fs');

const directoryName = path.basename(__dirname);

fs.readdir(__dirname, (err, files) => {
    if (err)
    {
        console.error('Error reading directory:', err);
        return;
    }

files.forEach(file => {
        console.log(`Directory: ${directoryName}`);
        console.log(`File Name: ${path.basename(file, path.extname(file))}`);
        console.log('Extension: ${path.extname(file)}`);
        console.log('------');
    });
});
```

Q.7 Create an Animate an element ,by changing its left to right in jquery code and css.

```
<html>
<head>
<title>Animated Element</title>
<style>
#animated-element
```

```
width: 200px;
   height: 50px;
   background-color: lightblue;
   position: absolute;
   top: 50%;
   left: 0;
   transform: translateY(-50%);
 </style>
</head>
<body>
 <div id="animated-element">This is the element to animate</div>
 <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
 <script>
  $(document).ready(function()
   $("#animated-element").animate({ left: "50%"}, {duration: 2000,easing: "swing"});
  });
 </script>
</body>
</html>
Q.8 Show the output
           Jquery Topics Are
          Selectors Types are
```

```
Parameters: It accept three parameters that are specified below
1. event:
3. data:This is the function that...Sel
  jquery Evenets
```

```
<html>
<head>
<title>Unordered list
</title>
<script src="jquery"></script>
<script>
```

```
$(document).ready(function()
$("p.mark").css("backgound-color","yellow");
$("#mark span").css("background-color","aqua");
$("ul li").css("background-color","yellow");
$("ul#mark li").css("background-color", "yellow");
$("ul.mark li").css("background-color","pink");
) </script>
</head>
<body>
mca-147
Jquery Topics Are
Selectors Types are
ul>
ID Selector
Class Selector
Universal Selector

    id="mark">Parameters: It accept three parameters that are specified below

event:
event:
data:This is the function that...<span>Selected element</span>
ul class="mark">
jquery Evenets
MouseOver
Mouseleave
</body>
</html>
```

Q.9 show rgb color using jquery

```
<html>
<head>
<title>Click to Show RGB Color</title>
<style>
body
{
font-family: Arial, sans-serif;
margin: 20px;
}
```

```
.color-box
 {
  width: 100px;
  height: 100px;
  margin: 10px;
  display: inline-block;
  cursor: pointer;
 }
 #red-box
  background-color: rgb(255, 0, 0);
 #green-box
  background-color: rgb(0, 128, 0);
 #blue-box
  background-color: rgb(0, 0, 255);
 #color-display
  font-weight: bold;
  margin-top: 20px;
 }
</style>
</head>
<body>
 <h1>Click a box to see its RGB color</h1>
 <div class="color-box" id="red-box"></div>
 <div class="color-box" id="green-box"></div>
 <div class="color-box" id="blue-box"></div>
 <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
 <script>
  $(document).ready(function()
   $(".color-box").click(function()
    $("#color-display").text($(this).css("background-color"));
   });
```

```
});
</script>
</body>
</html>
```

Q.10 Show the output (Fade in Fade Out)

```
Dr.D.Y.Patil School of Science
jQuery fadeln() method is used to fade in the element.

Fade in given Second | Fade Out given S econd |
```

```
<html>
<head>
<title>Fade In Out Example using Seconds</title>
<script src="jquery-3.7.1.min.js"></script>
<script>
$(document).ready(function()
$("#btn1").click(function()
$("div").fadeOut(3000);
$("#btn2").click(function()
$("div").fadeIn(3000);
$("p:last").click(function()
$("p").fadeTo("slow",0.40);
} );
});
</script>
</head>
<body>
<div style="background:rgba(130, 58, 140, 0.185);width:100%;">I learned JQuery
```

```
Technology</div>
Dr.D.Y.Patil School of Science
jQuery fadeIn() method is used to fade in the element. 
<button id="btn2">Fade in given Second</button>
<button id="btn1">Fade Out given Second</button>
</body>
</html>
```

Q.11 Write down the script using jquery ajax(),getJSON(),send().

1. JQUERY AJAX()

```
<html>
      <head>
      <script src=""></script>
      <script>
      $(document).ready(function()
       $("button").click(function()
         $.ajax({url: "demo_test.txt", success: function(result)
      {
          $("#div1").html(result);
         }});
       });
      });
      </script>
      </head>
      <body>
      <div id="div1"><h2>Let jQuery AJAX Change This Text</h2></div>
      <button>Get External Content</button>
      </body>
   2. GetJson()
<html>
<head>
<script src=""></script>
```

```
<script>
$(document).ready(function()
 $("button").click(function()
  $.getJSON("demo_ajax_json.js", function(result)
   $.each(result, function(i, field)
{
    $("div").append(field + " ");
   });
  });
 });
});
</script>
</head>
<body>
<button>Get JSON data</button>
<div></div>
</body>
</html>
   3. Send
<html>
<head>
<script src=""></script>
<script>
$(document).ready(function()
 $(document).ajaxSend(function(e, xhr, opt)
  $("div").append("Requesting " + opt.url + "");
 });
 $("button").click(function()
```

```
$("div").load("demo_ajax_load.asp");
 });
});
</script>
</head>
<body>
<div><h2>Let AJAX change this text</h2></div>
<button>Change Content</button>
</body>
</html>
Q.12 Write down database connectivity ajax with php
              12323232323
                           9812121212 Daughter
      Mahi
      Siya
              78778778787
                           9812121227 Friend
Q.13 Write the below code using addclass()
□. MCA
□ .MBA
□ .MSW
Q.14 Show the below output

    MBA

          • MCA
          · BTech AI
          · BTech CSD
          • BCA
<html>
<head>
  <title>Document</title>
</head>
```

<body>

```
        Ali>MBA
        Ali>MCA
        Style="color: blue;">B Tech AI 
        B Tech CSD
        Style="color: blue;">BCA 

        <body>
        </html>
```

Q.15 Show the below output

```
1st para:Dr. D. Y. Patil
```

2nd para:Jquery