1. Create a user defined module named Math with four functions

Addition,Substration,Multiplication,ivision and exports them.

function add(a,b){

   return a+b

}

function sub(a,b){

    return a-b

}

function mul(a,b){

    return a\*b

}

function div(a,b){

    return a/b

}

module.exports={

    add,

    sub,

    mul,

    div

};

const oper=require("./operation")

console.log(oper.add(10,5));

console.log(oper.sub(5,5));

console.log(oper.mul(5,5));

console.log(oper.div(5,5));

PS F:\java practical> node index.js

15

0

25

1

PS F:\java practical>

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

console.

const os=require('os');

console.log('HostName',os.hostname());

console.log('PlatForm',os.platform());

output

S F:\java practical> node os.js

HostName DESKTOP-PFVSG97

PlatForm win32

PS F:\java practical>

**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.**

**npm install colors**

let a=require('colors')

console.log('hello'.red);

console.log('welcome my dear students'.rainbow);

**Q.4 Create a Node js Script that displays a message “Welcome to Node**

**js Lecture” through loop**

const times = 5;

for (let i = 0; i < times; i++) {

    setTimeout(function(){

        console.log("Welcome to Node.js Lecture")

    },2000)

}

**Output**

**PS F:\java practical> node loop.js**

**Welcome to Node.js Lecture**

**Welcome to Node.js Lecture**

**Welcome to Node.js Lecture**

**Welcome to Node.js Lecture**

**Welcome to Node.js Lecture**

**Q.5 Write Node script file to display Current date and time by using**

**user defined date module.**

**Date.js**

function date(){

    const currentDate=new Date();

     return currentDate.toLocaleString();

}

module.exports=date;

**indexDate.js**

let date=require('./date')

console.log("current date and time",date())

**output**

**PS F:\java practical> node dateindex.js**

**current date and time 4/28/2024, 2:29:20 PM**

**6.** **Display Directory name, file extension and file**

**name on command prompt using node.**

const path =require('path')

console.log(path.dirname('F:\java practical\\5.2.js'))

console.log(path.dirname('F:\java practical'))

let test\_path=('F:\java practical\images');

console.log(path.parse(test\_path));

console.log(require('os').arch());

**out put**

PS F:\java practical> node 5.2.js

F:java practical

F:

{

root: 'F:',

dir: 'F:',

base: 'java practicalimages',

ext: '',

name: 'java practicalimages'

}

x64

**7.** **Create an Animate an element ,by changing its left to right in jquery**

**code and css.**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

    <script src="jquery-3.7.1.min.js"></script>

    <script>

        $(document).ready(function(){

            $('#btn1').click(function(){

                $('#div1').animate({left:'150px'});

            });

            $('#btn2').click(function(){

                $('#div1').animate({left:'0px'});

            });

        })

    </script>

</head>

<body>

    <div    id="div1"    style="height: 100px; width: 100px; background-color: red; position: absolute; margin-top: 40px;"></div>

    <button id="btn1">animate right to left</button>

    <button id="btn2">animate left to right</button>

</body>

</html>

**8.** **Show the output:-**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

    <script src="jquery-3.7.1.min.js"></script>

    <script>

        $(document).ready(function(){

            $('#ul1 li').css("background-color","yellow")

            $('span').css("background-color","aqua")

            $('.ul2 li').css("background-color","pink")

        })

    </script>

</head>

<body>

    <h3>Jquery topics are</h3>

    <h3>Selectors types are</h3>

    <ul id="ul1">

        <li>ID selectors</li>

        <li>class selectors</li>

        <li>universal selectors</li>

    </ul>

    <p>parameters it accept three parameters that are specifies below</p>

  <ol>

    <li>event</li>

    <li>event</li>

    <li>data:this is the <span>Selected element</span></li>

  </ol>

  <p>Jquery Event</p>

  <ul class="ul2">

    <li>mouseenter</li>

    <li>mouseleave</li>

  </ul>

</body>

</html>

**9.** **show rgb color using jquery**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Gaurav 2.2</title>

    <script src="jquery-3.7.1.min.js"></script>

</head>

<body>

    <h2>Gaurav Shinde</h2>

    <div style="display: flex;">

      <div style="width: 100px; height: 50px; background-color: aqua;"></div>

      <div style="width: 100px; height: 50px; background-color: #8a9e1c;"></div>

      <div style="width: 100px; height: 50px; background-color: rgb(110, 24, 156);"></div>

    <p id="col"></p>

</div>

<script>

    $(document).ready(function(){

        $(" div div").click(function(){

            let co=$(this).css("background-color");

            console.log(co)

            $("#col").html(co)

        })

    })

</script>

</body>

**10.** **Show the output:-**

****

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

    <script src="jquery-3.7.1.min.js"></script>

    <script>

        $(document).ready(function(){

            $("#b1").click(function(){

                $("#p1").fadeIn(1000);

            });

            $("#b2").click(function(){

                $("#p1").fadeOut(1000);

            });

        });

    </script>

</head>

<body>

    <div id="p1" style="background-color: blueviolet;">i learned j query technology</div>

    <P>Dr.D.Y.Ptil of science</P>

    <p>

        jquery dade()in method is uesd to fade in the element

    </p>

    <button id="b1">Fade in</button>

    <button id="b2">Fade out</button>

</body>

</html>

**13.** **Write the below code using addclass()**

** MCA**

** MBA**

** MSW**

<html>

<head>

<title> eq method </title>

<script src="jquery-3.7.1.min.js">

</script>

<script type="text/javascript" language ="javascript">

$(document).ready(function()

{

$("li").eq(3).addClass("selected");

});

</script>

<style>

.selected {color:red;}

</style>

</head>

<body>

<div>

<ul>

<li> MBA </li>

<li> MSC </li>

<li> BTech AI </li>

<li> MCA </li>

<li> BCA </li>

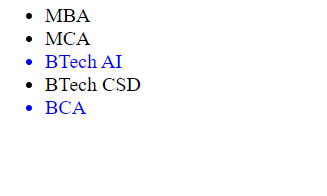
</ul>

</div>

</body>

</html>

**14.** **Show the below output:-**

****

<html>

<head>

<title> filter method </title>

<head>

<script src="jquery-3.7.1.min.js">

</script>

<script >

$(document).ready(function()

{

$("li").filter(".c2").addClass("selected");

});

</script>

<style>

.selected {color:blue;}

</style>

</head>

<body>

<div>

<ul>

<li class="c1"> MBA </li>

<li class="c1"> MCA </li>

<li class="c2"> BTech AI</li>

<li class="c3"> BTech CSD </li>

<li class="c2"> BCA </li>

</ul>

</div>

</body>

</html>

**15.** **Complete below given output using find selector**

****

<html>

<head>

<title> refining selections</title>

<script src="jquery-3.7.1.min.js">

</script>

<script type="text/javascript" language ="javascript">

$(document).ready(function()

{

$("p").find("span").addClass("selected");

});

</script>

<style>

.selected {color:red;}

</style>

</head>

<body>

<p> 1st para:<span>Dr. D. Y. Patil</span></p>

<p> 2nd para:<span>Jquery</span></p>

</body>

</html>