

```

<!DOCTYPE html>
<html>
<style>
td,tr{
padding-left:0.2px;
padding-bottom:0.2px;
}
.box1{
width:20px;
height:20px;
border:0.2px solid;
background-color:orangered;
}
.box2{
width:20px;
height:20px;
border:0.2px solid;
background-color:coral;
}
.box3{
width:20px;
height:20px;
border:0.2px solid;
background-color:brown;
}
</style>
<body>
<h1 align="center">Lab Program1</h1>
<table align="center">
<tr>
<td></td>
<td><div class="box1"></div></td>
<td><div class="box2"></div></td>
<td><div class="box3"></div></td>
<td><div class="box1"></div></td>
<td><div class="box2"></div></td>
<td><div class="box3"></div></td>
</tr>
<tr>
<td></td>
<td><div class="box2"></div></td>
<td><div class="box3"></div></td>
<td><div class="box1"></div></td>
<td><div class="box2"></div></td>

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<td><div class="box3"></div></td>
<td><div class="box1"></div></td>
</tr>
<tr>
<td></td>
<td><div class="box3"></div></td>
<td><div class="box1"></div></td>
<td><div class="box2"></div></td>
<td><div class="box3"></div></td>
<td><div class="box1"></div></td>
<td><div class="box2"></div></td>
</tr>
<tr>
<td></td>
<td><div class="box1"></div></td>
<td><div class="box2"></div></td>
<td><div class="box3"></div></td>
<td><div class="box1"></div></td>
<td><div class="box2"></div></td>
<td><div class="box3"></div></td>
</tr>
<tr>
<td></td>
<td><div class="box2"></div></td>
<td><div class="box3"></div></td>
<td><div class="box1"></div></td>
<td><div class="box2"></div></td>
<td><div class="box3"></div></td>
<td><div class="box1"></div></td>
</tr>
</table>
</body>
</html>

```

2.

```

<!DOCTYPE HTML>
<html>
<head>
<style>
#div1 {
width: 350px;
height: 70px;
padding: 10px;

```

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    border: 1px solid #aaaaaa;
}
</style>
</script>
<script>
function allowDrop(ev) {
    ev.preventDefault();
}
function drag(ev) {
    ev.dataTransfer.setData("text", ev.target.id);
}
function drop(ev) {
    ev.preventDefault();
    var data = ev.dataTransfer.getData("text");
    ev.target.appendChild(document.getElementById(data));
}
</script>
</head>
<body>
<p>Drag the W3Schools image into the rectangle:</p>
<div id="div1" ondrop="drop(event)" ondragover="allowDrop(event)"></div>
<br>

</body>
</html>

```

3.

```

<!DOCTYPE html>
<html>
<head>
    <title>Calculator</title>
    <style>
        .calculator {
            padding: 10px;
            border-radius: 1em;
            height: 380px;
            width: 400px;
            margin: auto;
        }
        input[type=button] {
            border: solid black 0.5px;
            width: 100%;
            border-radius: 5px;
            height: 70%;

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    }
</style>
</head>
<body>
<table class="calculator" align="center" style="display: grid ;">
  <tr>
    <td colspan="4"><input type="text" id="result" disabled /></td>
  </tr>
  <tr>
    <td>
      <input type="button" value="(" onclick="display('\(')" />
    </td>
    <td>
      <input type="button" value="CE" onclick="deleter()" />
    </td>
    <td>
      <input type="button" value=")" onclick="display('\)')" />
    </td>
    <td>
      <input type="button" value="C" onclick="clearScreen()" />
    </td>
  </tr>
  <tr>
    <td>
      <input type="button" value="1" onclick="display('1')"/>
    </td>
    <td>
      <input type="button" value="2" onclick="display('2')"/>
    </td>
    <td>
      <input type="button" value="3" onclick="display('3')"/>
    </td>
    <td>
      <input type="button" value="+" onclick="display('+')"/>
    </td>
  </tr>
  <tr>
    <td>
      <input type="button" value="4" onclick="display('4')"/>
    </td>
    <td>
      <input type="button" value="5" onclick="display('5')"/>
    </td>
    <td>

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        <input type="button" value="6" onclick="display('6')" />
    </td>
    <td>
        <input type="button" value="-" onclick="display('-)" />
    </td>
</tr>
<tr>
    <td>
        <input type="button" value="7" onclick="display('7)" />
    </td>
    <td>
        <input type="button" value="8" onclick="display('8)" />
    </td>
    <td>
        <input type="button" value="9" onclick="display('9)" />
    </td>
    <td>
        <input type="button" value="*" onclick="display('*)" />
    </td>
</tr>
<tr>
    <td>
        <input type="button" value="." onclick="display('.')" />
    </td>
    <td>
        <input type="button" value="0" onclick="display('0)" />
    </td>
    <td>
        <input type="button" value="=" onclick="calculate()" />
    </td>
    <td>
        <input type="button" value="/" onclick="display('/)" />
    </td>
</tr>
</table>
<script>
    function display(value) {
        document.getElementById("result").value += value;
    }
    function calculate() {
        var p = document.getElementById("result").value;
        var q = eval(p);
        document.getElementById("result").value = q;
    }

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function clearScreen() {
    document.getElementById("result").value = "";
}
function deleter() {
    var a = document.getElementById("result").value;
    a=a.substring(0,a.length-1)
    document.getElementById("result").value = a;
}
</script>
</body>
</html>

```

4.

```

<!DOCTYPE html>
<html>
<head>
<title>
    Bubbling Event in Javascript
</title>
</head>
<body>
<h2>Bubbling Event in Javascript</h2>
<div id="parent">
<button>
    <h2>Parent</h2>
</button>
<button id="child">
<p>Child</p>
</button>
</div><br>
<script>
    document.getElementById(
"child").addEventListener("click", function () {
    alert("You clicked the Child element!");
    }, false);
    document.getElementById(
"parent").addEventListener("click", function () {
    alert("You clicked the parent element!");
    }, false);
</script>
</body>
</html>

```

5.

```
<!DOCTYPE html>
<html>
<head>
<title>map_Filter_Reduce functions</title>
</head>
<body>
<script>
var users = [
    {"user": "krishna"},
    {"user": "vijay"},
    {"user": "vasu"},
    {"user": "venu"},
    {"user": "rajesh"},
    {"user": "varun"},
    {"user": "chandra"}
];
let resultDetails = users.map(user => {
    let mark = Math.random() * 100;
    user.mark = mark;
    return user
});
var selectedCandidate = resultDetails.filter(user => {
    if(user.mark > 80){
        return user;
    }
});
console.log("Map");
console.log(selectedCandidate);
const words = ['spray', 'limit', 'elite', 'exuberant', 'destruction', 'present'];
const result = words.filter(word => word.length > 6);
console.log("Filter");
console.log(result);
const users1 = [
    {
        name: "David John",
        city: "London",
        birthYear: 1998
    },
    {
        name: "Justin",
        city: "Canada",
        birthYear: null
    },
    {
```

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    name: "Yusuf Shea",
    city: "Paris",
    birthYear: 1990
  },
  {
    name: "Zerovsky",
    city: "Russia",
    birthYear: 2002,
  }
];
const currentYear = new Date().getFullYear();
const userNames = users1.reduce((filterUsers, user) => {
  if (user.birthYear && (currentYear - user.birthYear) > 25) {
    filterUsers.push(user.name);
  }
  return filterUsers;
}, []);
console.log("Reduce");
console.log(userNames);
</script>
</body>
</html>

```

6.

```

import React, { Component } from 'react'
class Counter extends Component {
  constructor(props) {
    super(props);
    this.state = {
      count: 0
    }
  }
  render() {
    return (
      <div>
        <h1>{this.state.count}</h1>
        <button onClick={() => { this.setState({ count: this.state.count + 1 }) }}>
          Increment</button>
        <button onClick={() => { this.setState({ count: this.state.count - 1 }) }}>
          Decrement</button>
      </div>
    )
  }
}

```


export default Counter

7.

```
import React, {Component} from 'react';
class TextColorDemo extends Component {
  constructor(props)
  super(props);
  this.state = {
    color : "#FF00FF"
  }
}
setRed = (e) => {
  this.setState({color: "#FF0000"});
}
setGreen = (e) => {
  this.setState({color: "#00FF00"});
}
setBlue = (e) => {
  this.setState({color: "#0000FF"});
}
render () {
  return(
    <div>
      <h1 style={{color:this.state.color}}>
        This is CSE A class room
      </h1>
      <button onClick = {this.setRed}>Red</button>
      <button onClick = {this.setGreen}>Green</button>
      <button onClick = {this.setBlue}>Blue</button>
    </div>
  );
}
}
export default TextColorDemo;
```

8.

```
function App() {
  const students = [
    {stno:'567', name:'Ravi Teja', branch:'cse'},
    {stno:'597', name:'Kiran Teja', branch:'cse'},
    {stno:'561', name:'Hari Teja', branch:'ece'},
    {stno:'569', name:'Varun Teja', branch:'it'},
    {stno:'1269', name:'Dharam Teja', branch:'it'}
  ]
}
```

```

const s = students.filter(stu=> stu.branch ==='ece')
return (
  <div className="App">
    <table border="1">
      <tr><th colspan="3">VVIT, Nambur</th></tr>
      <tr><th colspan="3">Student Details</th></tr>
      {
        s.map((student,index) =>(
          <tr key={ index }>
            <td width="50">{ student.stno }</td>
            <td width="150">{ student.name }</td>
            <td width="70">{ student.branch }</td>
          </tr>
        ))
      }
    </table>
  </div>
);
}
export default App;

```

9.

```

import React,{Component} from 'react'
class Clock extends Component{
  constructor(props){
    super(props);
    this.state={time:new Date()};
  }
  componentDidMount(){
    this.update=setInterval(()=>{
      this.setState({time:new Date()});},1*1000
    );
  }
  componentWillUnmount(){
    clearInterval(this.update);
  }
  render(){
    return(
      <div>
        <h1>Clock</h1>
        <h2>{this.state.time.toLocaleString()}</h2>
      </div>
    )
  }
}

```

```
}  
export default Clock
```

10.

```
import React, { useState } from 'react';  
function Example() {  
  const [count, setCount] = useState(0);  
  return (  
    <div>  
      <p>You clicked {count} times</p>  
      <button onClick={() => setCount(count + 1)}>  
        Click me  
      </button>  
    </div>  
  );  
}
```

11.

```
import React from 'react';  
import BlogContextDemo from './BlogContextDemo'  
const blogInfo = {  
  React: {  
    post: "Learn useContext Hooks",  
    author: "Varun K"  
  },  
  NodeJS: {  
    post: "Node Commands",  
    author: "Veena M"  
  }  
};  
export const BlogContext = React.createContext(blogInfo);  
export default function App() {  
  return (  
    <div className="App">  
      <div>  
        <h1>Hello KP</h1>  
        <BlogContext.Provider value={blogInfo}>  
          <BlogContextDemo />  
        </BlogContext.Provider>  
      </div>  
    </div>  
  );  
}
```

```

import React, {useContext} from "react";
import {BlogContext} from './BlogContext';
function BlogContextDemo() {
  const binfo = useContext(BlogContext);
  return (
    <div>
      <p>Topic: {binfo.React.post}</p>
      <p>Author: {binfo.React.author}</p>
    </div>
  );
}
export default BlogContextDemo;

```

12.

```

import React,{useState,useEffect} from 'react';
const Windowwidth=()=>{
  const [WindowWidthsize,setWindowwidthsize]=useState(0);
  useEffect(()=>{
    function handleResize(e){
      const {width}=document.body.getBoundingClientRect();
      setWindowwidthsize(Math.ceil(width));
    }
    window.addEventListener('resize',handleResize);
    return()=>window.removeEventListener('resize',handleResize);
  },[]);
  return(
    <h1>
      The window size {WindowWidthsize} Pixels
    </h1>
  )
}
export default WindowWidth

```

13.

```

import React, {useState, useEffect} from 'react';
import axios from 'axios';
function AxiosDemo() {
  const [posts, setPosts] = useState([]);
  useEffect(() => {
    axios.get("https://jsonplaceholder.typicode.com/posts")
      .then(res => {
        setPosts(res.data);
      })
      .catch(err => { console.log(err); })
  });
}

```

```

    }, [])
    return(
      <div>
        <h1> Data Fetching Demo </h1>
        <ol>
          {
            posts.map( post =>
              <li key={post.id}>
                {post.id}
              </li>
            ) }
          </ol>
        </div>
      );
    }
  }
export default AxiosDemo;

```

14.

import React, {useState} from 'react';

function Bmical() {

const [height,setHeight] = useState(0);

const [weight, setWeight] = useState(0);

const [name, setName] = useState("");

const calculateBMI = ()=> {

var heightSquared=((height/100) * (height/100));

var bmi = weight / heightSquared;

if(bmi < 16)

window.alert("Hi.."+name+"...You are completely UnderWeight (Severe Thinner)");

else

if(bmi >=16 && bmi < 17)

window.alert("Hi.."+name+"...You are Moderately UnderWeight (Moderate Thinner)");

else

if(bmi >=17 && bmi < 18.5)

window.alert("Hi.."+name+"...You are little UnderWeight (Mild Thinness)");

else if(bmi >= 18.5 && bmi <= 24.99){

window.alert("Hi.."+name+"...You are in a healthy weight range");}

else if(bmi >= 25 && bmi <= 29.9){

window.alert("Hi.."+name+"...You are overweight");}

else if(bmi >= 30 && bmi <= 34.9){

window.alert("Hi.."+name+"...You are obese-class-1");}

else if(bmi >= 35 && bmi <= 39.9){

window.alert("Hi.."+name+"...You are obese-class-2");}

else{

window.alert("Hi.."+name+"...You are obese-class-3");}

```

    bmi = Math.round(bmi * 100) / 100;
  }
  const submitMe = (e) =>{
    e.preventDefault();
    calculateBMI();
  }
  const handleName = (e) =>{
    setName(e.target.value);
  }
  const handleHeight = (e) =>{
    setHeight(e.target.value);
  }
  const handleWeight = (e) =>{
    setWeight(e.target.value);
  }
  return (
    <div classame="App">
      <h1>BMI Calculator</h1>
      <form onSubmit={submitMe}>
        <label>
          Please enter your name
        </label>
        <input type="text" name="name" value={name} onChange={handleName}/>
        <br/><br/>
        <label>
          Enter your height in cm:
        </label>
        <input type="text" name="height" value={height} onChange={handleHeight} />
        <br/><br/>
        <label>
          Enter your weight in kg :
        </label>
        <br/>
        <input type="text" name="weight" value={weight} onChange={handleWeight}/>
        <br/>
        <br/>
        <input type="submit" value="Submit" onSubmit={submitMe} />
      </form>
    </div>
  );
}
export default Bmical;

```