

**SIKSHA 'O' ANUSANDHAN**  
DEEMED TO BE UNIVERSITY

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**Laboratory Record**

**Computer Science Workshop 1 (CSE 2141)**

***Submitted by***

Name: Maheshwar Nag

Registration No.: 2141014002

Branch : CSE

Semester : 3<sup>rd</sup>

Section : N



**Department of Computer Science & Engineering**

**Faculty of Engineering & Technology (ITER)**

Jagamohan Nagar, Jagamara, Bhubaneswar, Odisha - 751030

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# HTML , CSS , JQUERY , BOOTSTRAP

1)

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>Container Example</title>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.1.3/css/
bootstrap.min.css">
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js">
</script>
<script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.3/umd/popper.m
in.
js"></script>
<script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.1.3/js/bootstrap.min.js"
>
</script>
</head>
<body>
<div class="container">
<h1>Lorem ipsum, dolor sit amet consectetur adipisicing elit. Fuga quas
quis adipisci expedita architecto dolor sunt quia sit tempora labore.
Rem, ad temporibus. Assumenda dolorum sunt, et accusamus ipsum eum
voluptas repudiandae fugiat consectetur laboriosam facere placeat vitae
sequi molestiae quasi, nisi itaque illum tempore, eos beatae ducimus
dignissimos distinctio. Iusto iure error in quod dicta nulla rem
deleniti, aliquam dolorum beatae eos amet quibusdam esse consectetur
adipisci consequatur tenetur quia voluptatem. Laudantium doloribus minus
porro iure quibusdam vero autem veritatis impedit incidunt tempora
voluptas, nisi provident illum molestiae et laborum repellendus, quis
neque quisquam quae unde! Iste, vel iure non doloribus dolorum
repudiandae omnis, alias enim provident eveniet odit nulla assumenda?
Fugiat, vitae! Perferendis perspiciatis laboriosam numquam rem magnam hic
exercitationem tempore quas vel officiis temporibus nisi dolor ipsa nam
nemo, amet animi voluptatem voluptatibus ut libero pariatur eos.
Laboriosam, earum? Nostrum culpa, amet excepturi blanditiis quidem cum
ducimus. Itaque quae commodi sunt doloribus iste inventore exercitationem
natus, ducimus dicta voluptatum tempore fugit ab hic quasi dolorem nisi
quaerat accusamus magni. Assumenda commodi eius adipisci minima aliquid
nihil mollitia consequatur dignissimos qui fugiat, debitis fugit
obcaecati eum laborum officia porro ipsa nisi beatae dolorem natus
deserunt voluptas. Dolorum, aspernatur?</h1>
<p>This paragraph is placed in a container class.</p>
<p>This paragraph is placed in a container class.</p>
```

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

## 2)

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>Display Headings</title>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.1.3/css/
bootstrap.min.css">
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js">
</script>
<script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.3/umd/popper.m
in.
js"></script>
<script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.1.3/js/bootstrap.min.js"
>
</script>
</head>
<body>
<div class="container-fluid">
<h1>This Is Our First Heading</h1>
<h1 class="display-1">This Is Our First Display Heading!</h1>
<h1 class="display-2">This Is Our Second Display Heading!</h1>
<h1 class="display-3">This Is Our Third Display Heading!</h1>
<h1 class="display-4">This Is Our Fourth Display Heading!</h1>
</div>
</body>
<script>
$(document).ready(function(){
alert($(".display-1").css("font-size"))
})
</script>
</html>
```

## 3)

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>Jumbotron</title>
<meta charset="utf-8">
```

```

<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.1.3/css
/bootstrap.min.css">
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js">
</script>
<script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.3/umd/popper.m
in.
js"></script>
<script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.1.3/js/bootstrap.min.js"
>
</script>
</head>
<body>
<div class="container">
<div class="jumbotron">
<h1>Jumbotron Example</h1>
<p>Use Bootstrap to add visually pleasing elements and an extensive list
of
functionalities in your website.</p>
</div>
<p>This paragraph does not come under jumbotron.</p>
</div>
</body>
</html>

```

#### 4)

```

<!DOCTYPE html>
<html lang="en">
<head>
<title>Bootstrap Alerts</title>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.1.3/css
/bootstrap.min.css">
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js">
</script>
<script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.3/umd/popper.m
in.
js"></script>
<script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.1.3/js/bootstrap.min.js"
>
</script>

```

```

</head>
<body>
<div class="container">
<h1>Alerts</h1>
<div class="alert alert-success">
<strong>Success!</strong> Such an alert generates the result of a
positive or
successful activity.
</div>
<div class="alert alert-info">
<strong>Info!</strong> Such an alert describes a piece of information
which can
neither be categorized as positive or negative.
</div>
<div class="alert alert-warning">
<strong>Warning!</strong> Such an alert generates a warning for the user.
</div>
<div class="alert alert-danger">
<strong>Danger!</strong> Such an alert describes the presence of a
negative
action.
</div>
<div class="alert alert-primary">
<strong>Primary!</strong> Such an alert describes important
information.
</div>
<div class="alert alert-secondary">
<strong>Secondary!</strong> Such an alert describes low priority
information.
</div>
<div class="alert alert-dark">
<strong>Dark!</strong> Such an alert has a dark grey background.
</div>
<div class="alert alert-light">
<strong>Light!</strong> Such an alert a light green background.
</div>
</div>
</body>
</html>

```

5)

```

<!DOCTYPE html>
<html>
<head>
<style>
.DropInk {
background-color: rgb(14, 218, 116);
color: rgb(5, 1, 1);
padding: 6px;
font-size: 20px;

```

```

border:2px solid rgb(255, 0, 21);
}
.dropdown {
float:left;
position: relative;
/* display: inline-block; */
}
.dropdown-content {
display: none;
position: absolute;
background-color: gray;
min-width: 100%;
box-shadow: 0px 7px 14px 0px rgba(0, 0, 0, 0.9);
}
.dropdown-content a {
color: black;
padding: 12px 16px;
text-decoration: none;
display: block;
}
.dropdown-content a:hover {
background-color: brown
}
.dropdown:hover .dropdown-content {
display: block;
}
.dropdown:hover .dropbtn {
background-color: orange;
}
a{
text-decoration: none;
}
</style>
</head>
<body>
<h2>Hoverable Dropdown</h2>
<p>To check the dropdown menu </p>
<div class="dropdown">
<a class="DropInk"href="#">Home</a>
<div class="dropdown-content">
<a href="#">a</a>
<a href="#">b</a>
<a href="#">c</a>
</div>
</div>
<div class="dropdown">
<a class="DropInk"href="#">About me</a>
<div class="dropdown-content">
<a href="#">e</a>
<a href="#">f</a>
<a href="#">g</a>
</div>
</div>

```

```

<div class="dropdown">
<a class="DropInk"href="#">Contact me</a>
<div class="dropdown-content">
<a href="#">i</a>
<a href="#">j</a>
<a href="#">k</a>
</div>
</div>
</body>
</html>

```

## 6)

```

<!DOCTYPE html>
<html lang="en">
<head>
<title>Bootstrap Example</title>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.1.3/css/
bootstrap.min.css">
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js">
</script>
<script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.3/umd/popper.m
in.
js"></script>
<script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.1.3/js/bootstrap.min.js"
>
</script>
</head>
<body>
<div class="container">
<h1>Table by container Example</h1>
<div class="row">
<div class="col-sm-3" style="background-color:rgb(128, 87,
0);">First Column</div>
<div class="col-sm-3" style="background-color:rgb(188, 144,
238);">Second Column</div>
<div class="col-sm-3" style="background-color:rgb(128, 0,
96);">Third Column</div>
<div class="col-sm-3" style="background-color:rgb(232, 238,
144);">Fourth Column</div>
</div>
<div class="row">
<div class="col-sm-3" style="background-color:green;">First
Column</div>
<div class="col-sm-3" style="backgroundcolor:
lightgreen;">Second Column</div>

```



```

<div class="col-sm-3" style="background-color:rgb(128, 30, 0);">Third Column</div>
<div class="col-sm-3" style="backgroundcolor:lightgreen;">Fourth Column</div>
</div>
<div class="row">
<div class="col-sm-3" style="background-color:rgb(21, 211, 21);">First Column</div>
<div class="col-sm-3" style="backgroundcolor:lightgreen;">Second Column</div>
<div class="col-sm-3" style="background-color:rgb(128, 41, 0);">Third Column</div>
<div class="col-sm-3" style="backgroundcolor:lightgreen;">Fourth Column</div>
</div>
<div class="row">
<div class="col-sm-3" style="background-color:rgb(8, 211, 8);">First Column</div>
<div class="col-sm-3" style="backgroundcolor:lightgreen;">Second Column</div>
<div class="col-sm-3" style="background-color:rgb(128, 41, 0);">Third Column</div>
<div class="col-sm-3" style="backgroundcolor:lightgreen;">Fourth Column</div>
</div>
</div>
<div class="container-fluid" width="500px">
<h1>Table by container-fluid Example</h1>
<div class="row">
<div class="col-sm-3" style="background-color:rgb(185, 153, 139);">First Column</div>
<div class="col-sm-3" style="background-color:rgb(32, 218, 32);">Second Column</div>
<div class="col-sm-3" style="background-color:rgb(128, 19, 0);">Third Column</div>
<div class="col-sm-3" style="backgroundcolor:lightgreen;">Fourth Column</div>
</div>
<div class="row">
<div class="col-sm-3" style="background-color:rgb(116, 146, 116);">First Column</div>
<div class="col-sm-3" style="backgroundcolor:lightgreen;">Second Column</div>
<div class="col-sm-3" style="background-color:rgb(128, 26, 0);">Third Column</div>
<div class="col-sm-3" style="backgroundcolor:lightgreen;">Fourth Column</div>
</div>
<div class="row">
<div class="col-sm-3" style="background-color:rgb(9, 197, 9);">First Column</div>
<div class="col-sm-3" style="backgroundcolor:lightgreen;">Second Column</div>

```

```

<div class="col-sm-3" style="background-color:rgb(128, 19, 0);">Third Column</div>
<div class="col-sm-3" style="backgroundcolor:lightgreen;">Fourth Column</div>
</div>
<div class="row">
<div class="col-sm-3" style="background-color:green;">First Column</div>
<div class="col-sm-3" style="background-color:rgb(110, 136, 110);">Second Column</div>
<div class="col-sm-3" style="background-color:rgb(128, 30, 0);">Third Column</div>
<div class="col-sm-3" style="backgroundcolor:lightgreen;">Fourth Column</div>
</div>
</div>
</body>
</html>

```

7)

```

<!DOCTYPE html>
<html>
<head>
<style>
.DropInk {
background-color: rgb(14, 218, 116);
color: rgb(5, 1, 1);
padding: 6px;
font-size: 20px;
border:2px solid rgb(255, 0, 21);
}
.dropdown {
float:left;
position: relative;
/* display: inline-block; */
}
.dropdown-content {
display: none;
position: absolute;
background-color: gray;
min-width: 100%;
box-shadow: 0px 7px 14px 0px rgba(0, 0, 0, 0.9);
}
.dropdown-content a {
color: black;
padding: 12px 16px;
text-decoration: none;
display: block;
}
.dropdown-content a:hover {

```

```

background-color: brown
}
.dropdown:hover .dropdown-content {
display: block;
}
.dropdown:hover .dropbtn {
background-color: orange;
}
a{
text-decoration: none;
}
</style>
</head>
<body>
<h2>Hoverable Dropdown</h2>
<p>To check the drowndown menu </p>
<div class="dropdown">
<a class="Droplnk"href="#">Home</a>
<div class="dropdown-content">
<a href="#">a</a>
<a href="#">b</a>
<a href="#">c</a>
</div>
</div>
<div class="dropdown">
<a class="Droplnk"href="#">About me</a>
<div class="dropdown-content">
<a href="#">e</a>
<a href="#">f</a>
<a href="#">g</a>
</div>
</div>
<div class="dropdown">
<a class="Droplnk"href="#">Contact me</a>
<div class="dropdown-content">
<a href="#">i</a>
<a href="#">j</a>
<a href="#">k</a>
</div>
</div>
</body>
</html>

```

8)

```

<!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, initialscale=

```

```

1.0">
<title>Document</title>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></
script>
</head>
<script>
$(document).ready(function(){
var lengthSpan=$("p > span").length;
alert(lngthspan)
})
</script>
<body>
<p><span>Maheshwar</span><span>Rohit</span><span>Amit</span></p>
</body>
</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=\, initial-scale=1.0">
<title>Document</title>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></
script>
</head>
<style>
th,td{
text-align: center;
}
</style>
<script>
$(document).ready(function(){
var row= $("table td");
for(var i=2;i<row.length;i+=3){
if(i%2===0){
row[i].style.color="red";
}else{
row[i].style.color="blue";
}
}
}
})
</script>
<body>
<table border="1">
<thead>
<tr>
<th>Name</th>
<th>Reg</th>
<th>Marks</th>
</tr>
</thead>

```

```

<tbody>
<tr>
<td>Maheshwar</td>
<td>2141014002</td>
<td>99</td>
</tr>
<tr>
<td>Maheshwar</td>
<td>2141014002</td>
<td>92</td>
</tr>
<tr>
<td>Maheshwar</td>
<td>2141014002</td>
<td>88</td>
</tr>
<tr>
<td>Maheshwar</td>
<td>2141014002</td>
<td>77</td>
</tr>
</tbody>
</table>
</body>
</html>

```

9)

```

<!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, initialscale=
1.0">
<title>Registration</title>
</head>
<style>
fieldset{
background-color: aqua;
}
h3{
text-decoration: underline;
font-weight: bold;
text-align: center;
}
div{
margin-left: 500px;
margin-right: 500px;
justify-content: center;
border: 2px solid blue;

```

```

background-color: darksalmon;
padding-left: 50px;
}
.submit{
width: 80%;
background-color: blanchedalmond;
}
</style>
<body>
<h3>Registration</h3>
<form action="page1.html"method="post">
<!-- <fieldset> -->
<div>
<p>
<label for="Name">Name
<input type="text">
</label>
</p>
<p>
<label for="email">Email
<input type="email" name="Email" id="">
</label>
</p>
<p>
<label for="mobile">Mobile
<input type="number" name="mobile" id="">
</label>
</p>
<p>
<label for="Gender">Gender
<label for="Male"><input type="radio" name="Gender"
Value="Male" id="">Male</label>
<label for="Female"><input type="radio" name="Gender"
Value="Female" id="">female</label>
</label>
</p>
<p>
<label for="Password">Password
<input type="password" name="password" id="">
</label>
</p>
<p>
<label for="submit">
<input class="submit" type="submit" value="submit">
</label>
</p>
</div>
</fieldset>
</form>
<script>
const form=document.getElementsByClassName("form");
const Name=document.getElementsByClassName("Name");
const email=document.getElementsByClassName("email");

```

```
// const mobile=document.getElementById("mobile");
// const Gender=document.getElementById("Gender");
// const Password=document.getElementById("Password");
form.addEventListener("submit",function(e){
e.preventDefault();
const NameValue=Name.value;
const emailValue=email.value;
localStorage.setItem("Name",NameValue)
localStorage.setItem("email",emailValue)
// const NameValue=Name.value;
// const NameValue=Name.value;
// const NameValue=Name.value;
// const NameValue=Name.value;
window.location.href="page1.html";
});
</script>
</body>
</html>
```

## 10)

```
<!DOCTYPE html>
<html>
<head>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js">
</script>
<script>
$(document).ready(function(){
$("#b1").click(function(){
$("h1, p").addClass("green");
$("div").addClass("size");
});
});
</script>
<style>
.size {
font-size: xx-small;
}
.green {
color: green;
}
</style>
</head>
<body>
<h1>The is the first heading!</h1>
<h2>The is the second heading!</h2>
<p>This is the first paragraph.</p>
<p>This is the second paragraph.</p>
<div>This is a piece of vital information.</div><br>
<button id ="b1">Push classes in elements</button>
```

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

11)

```
<!-- <!DOCTYPE html>
<html>
<head>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js">
</script>
<script>
$(document).ready(function(){
$("#button").click(function(){
alert("Background color = " + $("#p1").css("backgroundcolor"));
alert("Background color = " + $("#p2").css("backgroundcolor"));
alert("Background color = " + $("#p3").css("backgroundcolor"));
});
});
</script>
</head>
<body>
<h2>This is a heading</h2>
<p id="p1" style="background-color:dodgerblue">This is the first
paragraph.</p>
<p id="p2" style="background-color:orange">This is the second
paragraph.</p>
<p id="p3" style="background-color:yellow">This is the third
paragraph.</p>
<button>Show the background color of each paragraph.</button>
</body>
</html> -->
<!DOCTYPE html>
<html>
<head>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js">
</script>
<script>
$(document).ready(function(){
$("#button").click(function(){
$("#p1").css("background-color", "red");
$("#p2").css("background-color", "blue");
$("#p3").css("background-color", "green");
});
});
</script>
</head>
<body>
<h2>How to set a CSS property? </h2>
<p id="p1" style="background-color:dodgerblue">This is the first
```



```

paragraph.</p>
<p id="p2" style="background-color:orange">This is the second
paragraph.</p>
<p id="p3" style="background-color:yellow">This is the third
paragraph.</p>
<p>This paragraph is without any color.</p>
<button>Adjust the background color of the paragraphs.</button>
</body>
</html>

```

## 12)

```

<!DOCTYPE html>
<html>
<head>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js">
</script>
<script>
$(document).ready(function(){
$("#b1").click(function(){
$("img").before("<b>Adding text before the image.</b>");
});
$("#b2").click(function(){
$("img").after("Adding text after the image.");
});
});
</script>
</head>
<body>

<br><br>
<button id="b1">Adding text before the image.</button>
<button id="b2">Adding text after the image.</button>
</body>
</html>

```

## 13)

```

<!-- <!DOCTYPE html>
<html>
<head>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js">
</script>
<script>
$(document).ready(function(){

```

```

$("#b1").click(function(){
$("#p").append(" <b>New Content</b>.");
});
$("#b2").click(function(){
$("#ul").append("<li>Soup</li>");
});
});
</script>
</head>
<body>
<p>This is the first paragraph.</p>
<p>This is the second paragraph.</p>
<ul>
<li>Coffee</li>
<li>Tea</li>
<li>Water</li>
</ul>
<button id="b1">Append content at the end of paragraph.</button>
<button id="b2">Append item at the end of the list.</button>
</body>
</html> -->

```

## 14)

```

<!DOCTYPE html>
<html>
<head>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js">
</script>
<script>
function appTxt() {
var t1 = "<p>Using HTML to generate text</p>";
var t2 = $("<p></p>").text("Using jQuery to generate text.");
var t3 = document.createElement("p");
t3.innerHTML = "Some Content.";
$("#body").append(t1, t2, t3);
}
</script>
</head>
<body>
<button onclick="appTxt()">Append text</button>
</body>
</html>

```

## 15)

```

<!-- <!DOCTYPE html>
<html>

```

```

<head>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js">
</script>
<script>
$(document).ready(function(){
$("button").click(function(){
$("#d").remove();
});
});
</script>
</head>
<body>
<div id="d" style="height:500px;width:500px;border:3px solid green;
background-color:orange;">
We are using div element in our example.
<p>A button is used for deletion.</p>
<p>The button calls out the remove() method to delete the element.</p>
</div>
<br>
<button>Delete the div element from the page.</button>
</body>
</html> -->
<!DOCTYPE html>
<html>
<head>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js">
</script>
<script>
$(document).ready(function(){
$("button").click(function(){
$("p").remove(".b");
});
});
</script>
<style>
.b {
color: dodgerblue;
font-size: 40px;
}
</style>
</head>
<body>
<p class ="a">This is the first paragraph.</p>
<p class="b">This is the second paragraph.</p>
<p class="b">This is the third paragraph.</p>
<button>Remove all p elements with class="test"</button>
</body>
</html>

```

```

<!DOCTYPE html>
<html>
<head>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js">
</script>
<script>
$(document).ready(function(){
$("#b1").click(function(){
$("#p").prepend("<b>New Content</b>. ");
});
$("#b2").click(function(){
$("#ol").prepend("<li>Nuggets</li>");
});
});
</script>
</head>
<body>
<p>This is the first paragraph.</p>
<p>This is the second paragraph.</p>
<ol>
<li>Pizza</li>
<li>Burger</li>
<li>Sandwich</li>
</ol>
<button id="b1">Prepend content at the end of paragraph.</button>
<button id="b2">Prepend item at the end of the list.</button>
</body>
</html>

```

**17)**

```

<!DOCTYPE html>
<html>
<head>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js">
</script>
<script>
$(document).ready(function(){
$("#button").click(function(){
$("#h1, p").toggleClass("green");
});
});
</script>
<style>
.green{
color: red;
}
</style>

```

```

</head>
<body>
<h1>This is the first heading which is soon to be turned green!</h1>
<h2>This is the second heading which is going to remain the same!</h2>
<p>This is the first paragraph which is soon to be turned green.</p>
<p>This is the second paragraph which is soon to be turned green.</p>
<button>Use the toggleClass function</button>
</body>
</html>

```

## 18)

```

<!DOCTYPE html>
<html>
<head>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"></
script>
<script>
$(document).ready(function(){
$("button").click(function(){
$("div").animate({
left: '250px',
right: '250px',
height: 'toggle',
width: '+=150px'
});
$("div").css()
.slideUp(3000)
.slideDown(2500)
});
});
</script>
</head>
<body>
<button>Start Animation</button>
<div
style="background:dodgerblue;height:50px;width:50px;position:absolute;">
Animation</div>
</body>
</html>

```

## 19)

```

<!DOCTYPE html>
<html>
<head>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js">

```

```

</script>
<script>
$(document).ready(function(){
$("#toggle").click(function(){
$("#div").animate({left: '700px'});
$("#div").animate({
fontSize:'18em',
left: '0px',
right:'500px',
opacity: '0.4',
height: '300px',
width: '1366px',
},13600);
for(var i=0;i<100;i++){
$("#div").animate({
width:'toggle',
})
$("#stop").click(function(){
$("#div").stop();
});
}
});
// $("#stop").click(function(){
// $("#div").stop();
// });
});
</script>
</head>
<body>
<button id="toggle">Toggle the animation</button>
<p></p>
<div
style="background:dodgerblue;height:50px;width:50px;position:absolute;">M
aheshwar</div>
<button id="stop">stop the Animation</button>
</body>
</html>

```

20)

```

<!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, initialscale=
1.0">
<title>Calander</title>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></
script>

```

```
</head>
<script>
$(document).ready(function(){
$(".1").click(function(){
$(".January").hide()
$(".December").show()
})
$(".23").click(function(){
$(".January").hide()
$(".December").shMaheshwarRohitAmitow()
})
})
</script>
<style>
th,td{
padding:2px;
text-align: center;
}
.month th{
border: none;
}
.underline{
text-decoration: underline;
font-weight: bold;
}
</style>
<body>
<table class="January" border="1">
<thead>
<tr class="month">
<th class="1" style="cursor: pointer;">#128072</th>
<th></th>
<th></th>
<th class="underline">JANUARY</th>
<th></th>
<th></th>
<th class="2" style="cursor: pointer;">#128073</th>
</tr>
<tr>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Sat</th>
<th>Sun</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
```

```

<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td>31</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
<table class="December" border="1" style="display: none;">
<thead>
<tr class="month">
<th class="23" style="cursor: pointer;">&#128072</th>
<th></th>
<th></th>
<th class="underline">DECEMBER</th>
<th></th>
<th></th>
<th class="24" style="cursor: pointer;">&#128073</th>

```



```
</tr>
<tr>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Sat</th>
<th>Sun</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
```

```

<td>31</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
</body>
</html>

```

## JAVA

21)

```

package Generics;
// import java.util.ArrayList;
// import java.util.List;
// public class Ex {
// public static void main(String args[]){
// List<String> mylist = new ArrayList<String>();
// mylist.add("I love Arraylist");
// String mystring = mylist.get(0);
// System.out.println(mystring);
// }
// }
public class Ex<T> {
private T t;
public void set(T t) {
this.t = t;
}
public T get() {
return t;
}
public <U extends Number> void inspect(String string){
System.out.println("T: " + t.getClass().getName());
System.out.println("U: " + string.getClass().getName());
}
public static void main(String[] args) {
Ex<Integer> integerBox = new Ex<Integer>();
integerBox.set(15);
integerBox.inspect("some text"); // error: is presented
since this would still be returning a String
}
}
// public class Ex<T> {
// // where T describes the Type of the object use
// private T t;
// public void set(T t) { this.t = t; }
// public T get() { return t; }
// }

```

22)

```
package Java;
public class DemoArray {
    static char[] copySource = { 'f', 'g', 'o', 'd', 'a', 'm', 'n' };
    static char[] copyDest = {'a','b','c','d'};
    public static void main(String args[]) {
        System.arraycopy(copyDest, 0, copySource,0,copySource.length-4);
        // Copy from first array location by reading from the second element
        // and placing in the second array from the first element, with a
        length
        // of three elements
        System.out.println(new String(copyDest));
    }
}
```

23)

```
package Java;
class demo{
    public static void copyVal(String st1, String st2) {
        System.out.println("The First value is: "+st1);
        System.out.println("The Second value is: "+st2);
        st2=st1; //performs the copying of the first value to the second
        value
        System.out.println("The First value is: "+st1);
        System.out.println("The Second value is: "+st2);
    }
    public class DemoStatic {
        // public static void copyVal(String st1, String st2) {
        // st2=st1; //performs the copying of the first value to the
        second value
        // System.out.println("The First value is: "+st1);
        // System.out.println("The Second value is: "+st2);
        // }
        public static void main(String[] args) {
            copyVal("ABC", "XYZ");
        }
    }
}
```

24)

```
package Java;
import java.lang.Cloneable;
// the department class implements the cloneable interface
class Department implements Cloneable {
    int department_id;
```

```

String department_name;
// Department class constructor
public Department(int department_id, String department_name) {
this.department_id = department_id;
this.department_name = department_name;
}
// clone() method overriding using @Override
@Override
protected Object clone() throws CloneNotSupportedException {
return super.clone();
}
public static void main(String[] args) throws
CloneNotSupportedException {
Department d1 = new Department(45, "mechanical");
// clone d1 and copy it into d2 Department object
Department d2 = (Department) d1.clone();
System.out.println(d2.department_id);
System.out.println(d2.department_name);
}
}

```

**25)**

```

package Java;
enum CarTypes {Sport,Sedan,Hatchback,SUV,Mini,Hybrid}
public class EnumExample {
CarTypes carTypes;
public EnumExample(CarTypes carTypes) {
this.carTypes = carTypes;
}
public void carFeatures() {
switch (carTypes) {
case Sport:
System.out.println("Stylish car with power");
break;
case Hybrid:
System.out.println("Economical as partially runs on battery power");
break;
case Sedan:
case Hatchback:
case SUV:
System.out.println("Rear door swings upward to provide access to the
cargarea");
break;
case Mini:
System.out.println("Rear door swings upward to provide access to the
cargarea");
break;
default:
System.out.println("Just a car");
break;
}
}
}

```

```

}
}
public static void main(String[] args) {
    EnumExample carOne = new EnumExample(CarTypes.Sport);
    carOne.carFeatures();
    EnumExample carTwo = new EnumExample(CarTypes.Hatchback);
    carTwo.carFeatures();
    EnumExample carThree = new EnumExample(CarTypes.Mini);
    carThree.carFeatures();
}
}
// enum weekdays{
// sunday,
// Monday,Tuesday,Wrednesday,Thursday,Friday,Saturday;
// }
// public class EnumExample {
// public static void main(String[] args) {
// for (weekdays myVar : weekdays.values()) {
// System.out.println(myVar);
// }
// }
// }
// }

```

26)

```

package Java;
public class HelloWorldExample {
    static void Method() {
        {
            int firstnum;
            firstnum=1;
            System.out.println("first number is "+firstnum);
            firstnum=2;
            System.out.println("first number is now "+firstnum);
        }
        int firstnum;
        // {
        // int firstnum;
        // firstnum=1;
        // System.out.println("first number is "+firstnum);
        // firstnum=2;
        // System.out.println("first number is now "+firstnum);
        // }
        }
        public static void main(String[] args) {
            Method();
        }
    }
}

```

**27)**

```
package Java;
class OverloadingMethod {
void printOutput(int a) {
System.out.println("the first number is: " + a);
}
void printOutput(int a, int b) {
System.out.println("The two integers are: " + a + " and " + b);
}
double printOutput(double a) {
System.out.println("The double number is: " + a);
return a * a;
}
}
public class OverloadingDemo {
public static void main(String args[]) {
double results;
OverloadingMethod omObj = new OverloadingMethod();
omObj.printOutput(20);
omObj.printOutput(20, 30);
results = omObj.printOutput(2.5);
System.out.println("The multiplication results is: " + results);
}
}
```

**28)**

```
package Java;
class DemoEncap {
private int ssnValue;
private int employeeAge;
private String employeeName;
// We will employ get and set methods to use the class objects
public int getEmployeeSSN() {
return ssnValue;
}
public String getEmployeeName() {
return employeeName.toString();
}
public int getEmployeeAge() {
return employeeAge;
}
public void setEmployeeAge(int newValue) {
employeeAge = newValue;
}
public void setEmployeeName(String newValue) {
employeeName = newValue;
}
public void setEmployeeSSN(int newValue) {
```

```

    ssnValue = newValue;
}
public String toString() {
    return this.employeeName + " , " + this.employeeAge ;
}
public boolean equals(Object other){
    if(other==this){
        return true;
    }
    if(!(other instanceof DemoEncap)){
        return false;
    }
    DemoEncap d=(DemoEncap) other;
    return (ssnValue).compareTo(d.ssnValue);
}
public class TestEncapsulation {
    public static void main(String args[]) {
        DemoEncap obj1 = new DemoEncap();
        obj1.setEmployeeName("Mark");
        obj1.setEmployeeAge(30);
        obj1.setEmployeeSSN(12345);
        System.out.println("Employee Name is: " + obj1.getEmployeeName());
        System.out.println("Employee SSN Code is: " + obj1.getEmployeeSSN());
        System.out.println("Employee Age is: " + obj1.getEmployeeAge());
        System.out.println("Employee name and age is: " + obj1.toString());
        System.out.println("Employee name and age is: " + obj1.equals());
    }
}

```

29)

```

package Java;
class Tutor {
    String designate ="Tutor";
    String academyName ="NewAcademy";
    void performs() {
        System.out.println("Tutoring");
    }
}
public class ScienceTutor extends Tutor {
    String subject ="Science";
    public static void main(String args[]) {
        ScienceTutor obj = new ScienceTutor();
        System.out.println(obj.academyName);
        System.out.println(obj.designate);
        System.out.println(obj.subject);
        obj.performs();
    }
}

```

**30)**

```
package Java;
public class reverse {
    public static void reverse(int numbers[]){
        int first=0,last=numbers.length-1;
        while(first<last){
            int temp=numbers[last];
            numbers[last]=numbers[first];
            numbers[first]=temp;
            first++;
            last--;
        }
    }
    public static void main(String[] args) {
        int numbers[]={4,6,8,5,9,7};
        reverse(numbers);
        for(int i=0;i<numbers.length;i++){
            System.out.print(numbers[i]+" ");
        }
        System.out.println();
    }
}
```

**31)**

```
package Java;
public class Ex1 {
    public static void main(String[] args) {
        StringBuilder sbr = new StringBuilder();
        sbr.append("Greetings"); //adds 9 characters to the array
        System.out.println("String = "+sbr);
    }
}
```

**32)**

```
package Java;
import java.util.ArrayList;
import java.util.List;
public class AutoboxingExample {
    public static void main(String args[]){
        List<Integer> alist = new ArrayList<>();
        for (int i = 1; i < 10; i += 1){
            alist.add(i);
        }
        System.out.println(alist);
    }
}
```



```
}
```

**33)**

```
package Java;
class DemoEncap {
    private int ssnValue;
    private int employeeAge;
    private String employeeName;
    // We will employ get and set methods to use the class objects
    public int getEmployeeSSN() {
        return ssnValue;
    }
    public String getEmployeeName() {
        return employeeName.toString();
    }
    public int getEmployeeAge() {
        return employeeAge;
    }
    public void setEmployeeAge(int newValue) {
        employeeAge = newValue;
    }
    public void setEmployeeName(String newValue) {
        employeeName = newValue;
    }
    public void setEmployeeSSN(int newValue) {
        ssnValue = newValue;
    }
    public String toString() {
        return this.employeeName + " , " + this.employeeAge ;
    }
    public boolean equals(Object other){
        if(other==this){
            return true;
        }
        if(!(other instanceof DemoEncap)){
            return false;
        }
        DemoEncap d=(DemoEncap) other;
        return (ssnValue).compareTo(d.ssnValue);
    }
    public class TestEncapsulation {
        public static void main(String args[]) {
            DemoEncap obj1 = new DemoEncap();
            obj1.setEmployeeName("Mark");
            obj1.setEmployeeAge(30);
            obj1.setEmployeeSSN(12345);
            System.out.println("Employee Name is: " + obj1.getEmployeeName());
            System.out.println("Employee SSN Code is: " + obj1.getEmployeeSSN());
            System.out.println("Employee Age is: " + obj1.getEmployeeAge());
            System.out.println("Employee name and age is: " + obj1.toString());
        }
    }
}
```

```
System.out.println("Employee name and age is: " + obj1.equals());
}
}
```

**34)**

```
package Java;
// import java.util.*;
// public static void Divide(int a, int b){
// }
// public static void main(String[] args) {
// // Scanner sc=new Scanner (System.in);
// // System.out.println("Enter your number");
// // float x=sc.nextInt();
// // int a = 10;
// // long b = (int)a;
// // System.out.println(b);
// }
// }
public class Wrapperclass {
public static void main(String args[]){
Animal a =new Animal();
Dog d = new Dog();
if(a instanceof Animal){
System.out.println("a is a type of Animal");
}else{
System.out.println("a is NOT a type of Animal");
}
if(a instanceof Dog){
System.out.println("a is a type of Dog");
}else{
System.out.println("a is NOT a type of Dog");
}
if(d instanceof Animal){
System.out.println("d is a type of Animal");
}else{
System.out.println("d is NOT a type of Animal");
}
if(d instanceof Dog){
System.out.println("d is a type of Dog");
}else{
System.out.println("d is NOT a type of Dog");
}
}
}
}
```

**35)**

```
package Java;
import java.util.ArrayList;
import java.util.List;
public class UnboxingExample {
    public static void main(String args[]){
        ArrayList<Integer> nums = new ArrayList<Integer>();
        nums.add(1);
        nums.add(15);
        nums.add(20);
        System.out.println("Total is " + addNumbers(nums));
    }
    public static int addNumbers(List<Integer> nums) {
        int total = 0;
        for (Integer num: nums){
            total += num;
        }
        return total;
    }
}
```

**36)**

```
public class noofsetbits {
    public static int noofSetbits(int n){
        int count =0;
        int mask=1;
        for(int i=0;i<32;i++){
            if((n&mask)!=0){
                count++;
            }
            mask=mask<<1;
        }
        return count;
    }
    public static void main(String[] args) {
        System.out.println(noofSetbits(10));
    }
}
```

**37)**

```
public class OOPs {
    public static void main(String[] args) {
        fish shark=new fish();
        shark.eats();
    }
}
```

```

}
//Inheritance
class Animal{
String type;
void eats(){
System.out.println("eats");
}
void colors(){
System.out.println("blue");
}
}
class fish extends Animal{
int fins;
void swim(){
System.out.println("swim");
}
}

```

## MID-SEM

**38)**

```

package Midsem;
public class Q1 {
public static long reverseBits(long n, int i, int j) {
// Check if the i-th and j-th bits are different
if (((n >> i) & 1) != ((n >> j) & 1)) {
// XOR the i-th and j-th bits with 1 to flip them
n ^= (1L << i) | (1L << j);
}
return n;
}
public static void main(String[] args) {
long n = 11L; // A sample 64-bit integer
int i = 0; // Position of the i-th bit (0-indexed)
int j = 2; // Position of the j-th bit (0-indexed)
System.out.println(Long.toBinaryString(n)); // Print the
original number in binary
long reversed = reverseBits(n, i, j);
System.out.println(Long.toBinaryString(reversed)); // Print the
reversed number in binary
}
}

```

**39)**

```

package Midsem;
import java.util.*;

```

```

public class Q2 {
    public static int[] deleteDuplicates(int[] arr) {
        int n = arr.length;
        int j = 0;
        for (int i = 0; i < n - 1; i++) {
            if (arr[i] != arr[i + 1]) {
                arr[j++] = arr[i];
            }
        }
        arr[j++] = arr[n - 1];
        return Arrays.copyOf(arr, j);
    }
    public static void main(String[] args) {
        int[] arr = {1, 1, 2, 2, 2, 3, 4, 5, 5, 5, 6, 6, 7, 8, 8, 9};
        System.out.println("Original array: " + Arrays.toString(arr));
        int[] noDuplicates = deleteDuplicates(arr);
        System.out.println("Array with no duplicates: " +
            Arrays.toString(noDuplicates));
    }
}

```

**40)**

```

package Midsem;
public class Q3 {
    public static boolean hasPalindrome(String sentence) {
        String[] words = sentence.split(" "); // Split the sentence
        into words
        for (String word : words) {
            String reverse = new
            StringBuilder(word).reverse().toString();
            if (word.equals(reverse)) { //palindrome
                return true;
            }
        }
        return false;
    }
    public static void main(String[] args) {
        String sentence = "Hello world madam ";
        String[] words = sentence.split(" ");
        System.out.println("Original sentence: " + sentence);
        for (String word : words) {
            String reverse = new
            StringBuilder(word).reverse().toString();
            System.out.println("Reverse of '" + word + "': " + reverse);
        }
        if (hasPalindrome(sentence)) {
            System.out.println("The sentence contains a palindrome.");
        } else {
            System.out.println("The sentence does not contain a
            palindrome.");
        }
    }
}

```

}  
}