

CYCLE 2(JAVASCRIPT)

RESULTS AND OBSERVATIONS:

```
Name=Albin binu
Length of string=10
Name in uppercase:ALBIN BINU
Name in lower case albin binu
Hello world-----
e
value of pi=3.141592653589793
Rounded value of 44.56=45
Minimum rounded value of 44.56=44
Power value(2,3)=8
```

INFERENCE:

We can convert any string into lowercase or uppercase using predefined function. Find length of string using length property. Round any integer using round() function. Calculating the power value using pow() function.

PREDEFINED FUNCTIONS

PROGRAM NO: 6

DATE: 8-12-21

AIM:

Create a HTML JS page to explain the use of various predefined functions in a string to print a name and find the length of a string. Also display PI, rounded min and power value of integer using math object in java script.

THEORETICAL SUPPORT:

The length property returns the length of a string The Math.round() method round a number to nearest integer. The Math.pow() method returns the value of x to the power of y(x^y).

CODE:

```
<!DOCTYPE html>

<html>
<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <title>String</title>
</head>
<script>
var name="Albin binu"
document.write("Name="+name)
document.write("<br>")
document.write("\nLength of string="+name.length)
document.write("<br>")
document.write("\nName in uppercase:"+name.toUpperCase())
document.write("<br>")
document.write("\nName in lower case:"+name.toLowerCase())
document.write("<br>")
var a="Hello"
var b="world"
document.write("\n"+a.concat(" ",b))
document.write("-----")
document.write("<br>")
```

```
document.write(a.charAt(1))  
document.write("<br>")  
document.write("value of pi="+Math.PI)  
document.write("<br>")  
document.write("Rounded value of 44.56=",Math.round("44.56"))  
document.write("<br>")  
document.write("Minimum rounded value of 44.56=",Math.floor("44.56"))  
document.write("<br>")  
document.write("Power value(2,3)="+Math.pow(2,3))  
</script>  
<body>  
</body>  
</html>
```

RESULTS AND OBSERVATIONS:

2	2022				Calendar	
MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

INFERENCE:

We can create calendar using predefined date methods in javascript and the calender is structured using table.

CALENDAR

PROGRAM NO: 7

DATE: 8-12-21

AIM:

Generate the calendar using JavaScript code

THEORETICAL SUPPORT:

The getFullYear() method returns the year of a date as a four digit number: The getMonth() method returns the month of a date as a number (0-11): The getDate() method returns the day of a date as a number (1-31)

CODE:

```
<!DOCTYPE HTML>
<html>
  <head>
    <style>
      table {
        border-collapse: collapse;
      }
      td,
      th {
        border: 1px solid black;
        padding: 3px;
        text-align: center;
      }

      th {
        font-weight: bold;
        background-color: #E6E6E6;
      }
    </style>
  </head>
  <body>
    <input id="month" type="text" name="mo" placeholder="Month in Number"></input>
    <input id="year" type="text" name="yr" placeholder="Year in Number"></input>
```

```
<input type="button" name="calendar" onClick="print()" value="Calendar">
```

```
<div id="calendar"></div>
```

```
<script>
```

```
function createCalendar(elem, year, month) {
```

```
    let mon = month - 1;
```

```
    let d = new Date(year, mon);
```

```
    let table=
```

```
    '<table><tr><th>MONDAY</th><th>TUESDAY</th><th>WEDNESDAY</th><th>THURS  
DAY</th><th>FRIDAY</th><th>SATURDAY</th><th>SUNDAY</th></tr><tr>';
```

```
        for (let i = 0; i < getDay(d); i++) {
```

```
            table += '<td></td>';
```

```
        }
```

```
    while (d.getMonth() == mon) {
```

```
        table += '<td>' + d.getDate() + '</td>';
```

```
        if (getDay(d) % 7 == 6) {
```

```
            table += '</tr><tr>';
```

```
        }
```

```
        d.setDate(d.getDate() + 1);
```

```
    }
```

```
    if (getDay(d) != 0) {
```

```
        for (let i = getDay(d); i < 7; i++) {
```

```
            table += '<td></td>';
```

```
        }
```

```
    }
```

```
    table += '</tr></table>';
```

```
    elem.innerHTML = table;
```

```
}
```

```
function getDay(date) {
```

```
    let day = date.getDay();
```

```
    if (day == 0) day = 7;
```

```
    return day - 1;
```

```
}
```

```
function print(){
```

```
var mon=document.getElementById("month").value;
console.log(mon);
var yer=document.getElementById("year").value;
console.log(yer);
createCalendar(calendar, yer, mon);
}
</script>
</body>
</html>
```


RESULTS AND OBSERVATIONS:

Registration Form

User Id:

Password:

Name:

Address:

Country:

Zip Code:

Email:

Sex: ☐ Male ☐ Female

Language: ☒ English ☐ Non English

About:

INFERENCE:

A part from ensuring that users provide necessary information, validation has to ensure that users provide information in the correct format. This applies to various cases such as email address, URL, dates, phone numbers and others. If the information is not in the correct format, users should be informed and correct format should be suggested.

FORM VALIDATION

PROGRAM NO: 8

DATE: 13-12-21

AIM:

Create a HTML registration form and perform JavaScript Form Validation using the Sample Registration Form

THEORETICAL SUPPORT:

HTML form validation can be done by JavaScript. If a form field (fname) is empty, this function alerts a message, and returns false, to prevent the form from being submitted: JavaScript is often used to validate numeric input:

CODE:

```
<!DOCTYPE html>

<html>
<head>
  <title>form</title>
</head>
<body>
  <h1>Registration Form</h1>
  <form name="form" onsubmit="check();return false">
<table>
  <tr>
    <td>User Id:</td>
    <td><input type="text" name="userid"></td>
  </tr>
  <tr>
    <td>Password:</td>
    <td><input type="password" name="password"></td>
  </tr>
  <tr>
    <td>Name:</td>
    <td><input type="text" name="fullname"></td>
  </tr>
```

```

<tr>

    <td>Address:</td>

    <td><input type="text"></td>

</tr>

<tr>

<td>

        Country:

    </td>

    <td>

        <select name="country">

            <option value="">please select a country</option>

            <option value="india">india</option>

            <option value="china">china</option>

        </select>

    </td>

</tr>

<tr>

    <td>Zip Code:</td>

    <td><input type="text" name="zipcode"></td>

</tr>

<tr>

    <td>Email:</td>

    <td><input type="text" name="email"></td>

</tr>

<tr>

    <td>Sex:</td>

    <td><input type="radio" name="s" value="male"> Male

        <input type="radio" name="s" value="female"> Female</td>

</tr>

<tr>

    <td>Language:</td>

    <td><input type="checkbox" id="l">English <input type="checkbox" name="lang"

id="l">Non English</td>

</tr>

<tr>

    <td>About:</td>

```

```

        <td><textarea rows="5"></textarea></td>

    </tr>

    <tr>

        <td>

            <td>

                <td>

                    <input type="submit">

                </td>

            </td>

        </tr>
    </table>
</form>
<script>

```

```

function check() {
    var userid=document.form.userid.value;
    var pass=document.form.password.value;
    var name=document.form.fullname.value;
    var country=document.form.country.value;
    var zip=document.form.zipcode.value;
    var email=document.form.email.value;
    var gen=document.form.s.value;
    var pat = /^[A-Za-z]+$;/
    var e=/[a-z0-9._%+-]+@[a-z.-]+\.[a-z]{3,3}$/

    if (userid == "") {
        alert("Enter the userid");
        document.form.userid.focus();
        return false;
    }

    else if(userid.length <5 || userid.length >12) {
        alert("length of userid is between 5 to 12")
        document.form.userid.focus();
        return false
    }

    if (pass == "") {
        alert("Enter the password");
        document.form.password.focus();
    }
}

```

```

        return false;
    }
else if(pass.length <7 || pass.length >12) {
    alert("length of password is between 7 to 12")
    document.form.password.focus();
    return false
}
if (name == "") {
    alert("Enter the name");
    document.form.fullname.focus();
    return false;
}
else if(name.match(pat))
{
    alert("Please enter Alphanumerics only.");
    return false;
}
if (country == "") {
    alert("select the country");
    document.form.country.focus();
    return false;
}

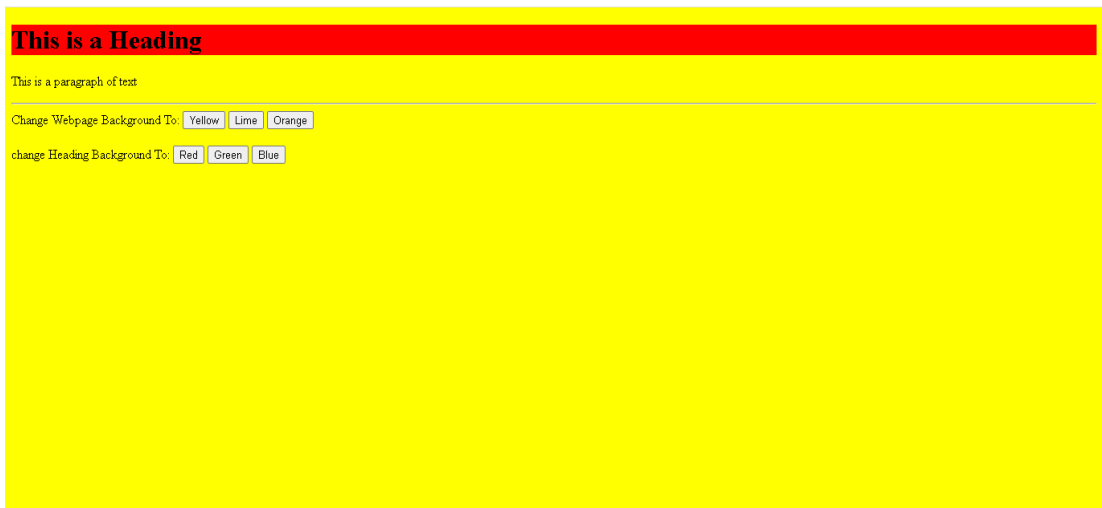
if (zip == "") {
    alert("Enter the zipcode");
    document.form.zipcode.focus();
    return false;
}
else if(isNaN(zip)) {
    alert("Enter number only");
    document.form.zipcode.focus();

    return false;
}
if (email == "") {
    alert("Enter the email");

```

```
        document.form.email.focus();
        return false;
    }
    else if(email.match(e))
    {
    }
    else
    {
        alert("Please enter email correctly.");
        return false;
    }
    if (gen == "") {
        alert("select the gender");
    }
    if(document.getElementById('l').checked)
    {
        return true;
    }
    else
    {
        alert ("select the language");
        return false;
    }
}
</script>
</body>
</html>
```

RESULTS AND OBSERVATIONS:



INFERENCE:

The onclick event occurs when the user clicks on an element and onclick event used here for changing the colors.

EVENT HANDLING

PROGRAM NO: 9

DATE: 18-12-21

AIM:

Create a HTML page to change the background colour for every click of buttons using JavaScript Event Handling.

THEORETICAL SUPPORT:

The change in the state of an object is known as an Event. In html, there are various events which represents that some activity is performed by the user or by the browser. When javascript code is included in HTML, js react over these events and allow the execution. This process of reacting over the events is called Event Handling.

CODE:

```
<!DOCTYPE html>

<html>
<head>
  <title>background</title>
</head>
<body>
<h1 id="h">This is a Heading</h1>
<p>This is a paragraph of text</p>
<hr>
Change Webpage Background To:
<button onclick="changeback('yellow')"> Yellow </button>
<button onclick="changeback('lime')"> Lime </button>
<button onclick="changeback('orange')"> Orange </button>
<br>
<br>
change Heading Background To:
<button onclick="changehead('red')"> Red </button>
<button onclick="changehead('green')"> Green </button>
<button onclick="changehead('blue')"> Blue </button>
<script>
```



```
function changeback(color) {  
document.body.style.background=color  
}  
function changehead(color) {  
var c=document.getElementById("h");  
c.style.background=color  
}  
</script>  
</body>  
</html>
```

RESULTS AND OBSERVATIONS:

[Go to Google](#)

WELCOME



INFERENCE:

The onmouseover event occurs when the mouse pointer is moved onto an element.

MOUSE EVENT

PROGRAM NO: 10

DATE: 18-12-21

AIM:

Create a HTML page to display a new image and text when the mouse comes over the existing content (link reference) in the page using JavaScript Event Handling.

THEORETICAL SUPPORT:

Events that occur when the mouse interacts with the HTML document belongs to the `MouseEvent` Object.

CODE:

```
<!DOCTYPE html>
<html>
<head>
  <title>mouseover</title>
</head>
<body>
<h2><a href="http:www.google.com" onmouseover="show()" onmouseout="hide()">Go to
  Google</a></h2>
<div id="t1"></div>
<div id="t2"></div>
<script>
function show(){
  document.getElementById("t1").innerHTML="<h1><center>WELCOME</center></h1>";
  var im='<center></center>'
  document.getElementById("t2").innerHTML=im;
}
function hide(){
  document.getElementById("t1").innerHTML="";
  document.getElementById("t2").innerHTML="";
}
</script>
</body></html>
```

RESULTS AND OBSERVATIONS:

Exam Questions

Question 1
He _____ it.

- ☐ don't like
☐ doesn't like
☐ doesn't likes

Question 2
They _____ here very often.

- ☐ don't come
☐ doesn't come
☐ doesn't comes

Question 3
John and Mary _____ twice a week.

- ☐ come
☐ comes
☐ coming

Question 4
I _____ mind at all.

- ☐ not
☐ isn't
☐ don't

Question 5
It _____ sense.

- ☐ don't make
☐ doesn't makes
☐ doesn't make

Question 6
They _____ happy.

- ☐ seem
☐ seems
☐ seeming

Question 7
You _____ to do it.

- ☐ don't have
☐ doesn't have
☐ doesn't has

Question 8
She _____ a brother.

- ☐ doesn't has
☐ don't has
☐ doesn't have

Question 9
The journey _____ an hour.

- ☐ take
☐ takes
☐ taking

Question 10
I _____ it now.

- ☐ want
☐ wants
☐ wanting

Question 11
Peggy _____ by bus.

- ☐ come
☐ comes
☐ coming

Question 12
She _____.

- ☐ don't know
☐ doesn't knows
☐ doesn't know

Question 13
She _____ hard.

- ☐ try
☐ tries
☐ uses

Question 14
They _____ football every weekend.

- ☐ play
☐ plays
☐ playing

Question 15
The exam _____ two hours.

- ☐ last
☐ lasts
☐ lasts

INFERENCE:

We can create online exam using html and javascript . Radio buttons are used for options and if condition is checked for each question inside the javascript.

ONLINE EXAM

PROGRAM NO: 11

DATE: 23-12-21

AIM:

Create a HTML page to show online exam using JavaScript.

THEORETICAL SUPPORT:

In HTML, a radio button is used to select one of many given choices. Radio buttons are shown in radio groups to show a set of related options, only one of which can be selected.

CODE:

```
<!DOCTYPE html>
<html>
<head>
  <title>quiz</title>
</head>
<body>

<script type="text/javascript">

function result()
{
  var score=0;

  if(document.getElementById('q1').checked)
    score=score+1;
  if(document.getElementById('q2').checked)
    score=score+1;
  if(document.getElementById('q3').checked)
    score=score+1;
  if(document.getElementById('q4').checked)
    score=score+1;
  if(document.getElementById('q5').checked)
    score=score+1;
```

```

        if(document.getElementById('q6').checked)
            score=score+1;
        if(document.getElementById('q7').checked)
            score=score+1;
        if(document.getElementById('q8').checked)
            score=score+1;
        if(document.getElementById('q9').checked)
            score=score+1;
        if(document.getElementById('q10').checked)
            score=score+1;
    if(document.getElementById('q11').checked)
        score=score+1;
        if(document.getElementById('q12').checked)
            score=score+1;
        if(document.getElementById('q13').checked)
            score=score+1;
        if(document.getElementById('q14').checked)
            score=score+1;
        if(document.getElementById('q15').checked)
            score=score+1;
        document.write("<h1 style='background-color:grey;color:white'>Your      score:</h1>"+score);
    }
</script>
<h1><center>Exam Questions</center></h1>
<label style="font-weight:bold">Question 1</label>
<br>
<label style="font-weight:bold">He_____it.</label><br><br>
<input type="radio" name="q1" id="q1">don't like<br>
<input type="radio" name="q1">doesn't like<br>
<input type="radio" name="q1">doesn't likes<br>
<hr>
<label style="font-weight:bold">Question 2</label>
<br>
<label style="font-weight:bold">They_____here very often.</label><br><br>
<input type="radio" name="q2">don't come<br>
<input type="radio" name="q2" id="q2">doesn't come<br>

```

☐doesn't comes

<hr>
<label style="font-weight:bold">Question 3</label>

<label style="font-weight:bold">John and Mary_____twice a
week.</label>

<input type="radio" name="q3">come

<input type="radio" name="q3" id="q3">comes

<input type="radio" name="q3">coming

<hr>
<label style="font-weight:bold">Question 4</label>

<label style="font-weight:bold">I_____mind at all.</label>

<input type="radio" name="q4">not

<input type="radio" name="q4">isn't

<input type="radio" name="q4" id="q4">don't

<hr>
<label style="font-weight:bold">Question 5</label>

<label style="font-weight:bold">it_____sense.</label>

<input type="radio" name="q5">don't make

<input type="radio" name="q5">doesn't makes

<input type="radio" name="q5" id="q5">doesn't make

<hr>Page-31

<label style="font-weight:bold">Question 6</label>

<label style="font-weight:bold">They_____happy.</label>

<input type="radio" name="q6">seem

<input type="radio" name="q6" id="q6">seems

<input type="radio" name="q6">seeming

<hr>
<label style="font-weight:bold">Question 7</label>

<label style="font-weight:bold">you_____to do it.</label>

<input type="radio" name="q7" id="q7">don't have

☐doesn't have

<input type="radio" name="q7">doesn't has

<hr>
<label style="font-weight:bold">Question 8</label>

<label style="font-weight:bold">she_____a brother.</label>

<input type="radio" name="q8">doesn't has

<input type="radio" name="q8">don't has

<input type="radio" name="q8" id="q8">doesn't have

<hr>
<label style="font-weight:bold">Question 9</label>

<label style="font-weight:bold">The journey_____an hour.</label>

<input type="radio" name="q9">take

<input type="radio" name="q9" id="q9">takes

<input type="radio" name="q9">taking

<hr>
<label style="font-weight:bold">Question 10</label>

<label style="font-weight:bold">I_____it now.</label>

<input type="radio" name="q10">want

<input type="radio" name="q10" id="q10">wants

<input type="radio" name="q10">wanting

<hr>
<label style="font-weight:bold">Question 11</label>

<label style="font-weight:bold">Peggy_____by bus.</label>

<input type="radio" name="q11" id="q11">come

<input type="radio" name="q11">comes

<input type="radio" name="q11">coming

<hr>
<label style="font-weight:bold">Question 12</label>

<label style="font-weight:bold">She_____.</label>

<input type="radio" name="q12" id="q12">don't know

<input type="radio" name="q12">doesn't knows

<input type="radio" name="q12">doesn't know

<hr>

<label style="font-weight:bold">Question 13</label>

Page-32

<label style="font-weight:bold">She_____hard.</label>

<input type="radio" name="q13">try

<input type="radio" name="q13" id="q13">trys

<input type="radio" name="q13">tries

<hr>

<label style="font-weight:bold">Question 14</label>

<label style="font-weight:bold">They_____football every weekened.</label>

<input type="radio" name="q14">play

<input type="radio" name="q14" id="q14">plays

<input type="radio" name="q14">playing

<hr>

<label style="font-weight:bold">Question 15</label>

<label style="font-weight:bold">The exam_____two hours.</label>

<input type="radio" name="q15" id="q15">last

<input type="radio" name="q15">lastes

<input type="radio" name="q15">lasts

<hr>

<button type="submit" onclick="result()">Submit</button>

</body>

</html>